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DAILY DIGEST

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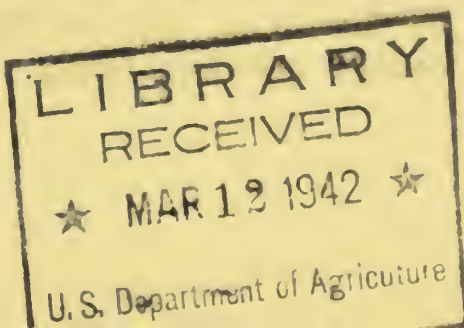
Washington, D.C., March 2, 1942

FROSTED FOODS IN DEMAND. Butchers' Advocate, February 18: Frosted foods now enjoy greater consumer acceptance (4c out of every food dollar now goes for frosted foods). Besides, they eliminate loss through spoilage or shrinkage; guarantee a fixed profit of from 22% to 25% and are generally not subject to price cutting. Frosted foods enable a retailer to install a complete fruit, vegetable and fish department, (meats and poultry are optional) all condensed into a small cabinet taking a good deal less room than a similar fresh department and requiring a great deal less care and handling.

PLANT HUNTERS IN THE ANDES. Chemurgic Digest (Vol. 1, No. 2): In this excellent book by T. Harper Goodspeed, the Peruvian and Chilean accomplishments and experiences of the two plant-hunting expeditions sent out by the University of California Botanical Garden are reported. During these expeditions many strains of the tobacco plant were collected for the U.S.D.A. and sent to Washington. There tobacco experts are using these strains in their search for disease-resistant varieties. In addition, many other new plants were found and classified. The volume contains many illustrations secured by members of the expeditions.

FARM CREDIT "PLATFORM." American Agriculturist, February 14: A "credit platform" for northeastern agriculture was announced recently by the Farm Credit Board of Springfield (Mass.), for farmers and farmers' cooperatives to help them strengthen their financial situation in 1942. The board recommends: Those who are out of debt can make no better use of funds than to purchase Defense Bonds. Those who are in debt for long-term investments: Reduce debts as rapidly as possible. Those who have short term debts which represent long-term investments: Refinance debts and put them into long-term loans at low interest rates. Those who plan to step up their production or expand their business: Better care and feeding of the present herds and flocks can produce most of the increased milk and eggs needed now. All farmers, individually or in cooperative groups: It is economy and good business to hire credit at the lowest cost and make purchases for cash.

HALF MILLION BURLAP BAGS SALVAGED. Office for Emergency Management release (No. WPB 336): The Bureau of Industrial Conservation reported February 24 that conservation appeals have resulted in more than a half million burlap bags being returned to wool growers by mills for re-use.



Washington, D.C., March 2, 1942

BOOKLET ON CANADIAN PRICE CONTROL. Canadian Textile Journal, February 13: A comprehensive booklet giving a general outline of price control policy, its necessity, development and application has been made available by the Wartime Prices and Trade Board. Stating that the dangers of inflation and the necessities of price control continue to increase in proportion to our war effort, the booklet points out that in this war nearly one-half our energies are being diverted for war use. Sharp rise in prices and costs in 1941 warned Canadians that inflationary forces were getting out of hand and tremendous pressure was put on prices and in turn on the costs of production. There has been partial price control in Canada since the outbreak of war regarding rentals, coal, sugar, timber, etc., directed toward removing bottlenecks of supply. Copies of this booklet, "Price Control in Canada," may be obtained, without charge, by writing to the Wartime Prices and Trade Board, Ottawa.

ALCOHOL PRODUCTION A CHALLENGE TO CHEMURGY Walter B. Jones, in Agricultural Engineering, February: Curtailment of supplies of ethyl alcohol available for civilian use, due to its need for munitions manufacture, and reflection of that same need in the sugar rationing plan, suggest that we may have been misguided in judging the fuel alcohol question entirely by technical and economic criteria. We now would be in a more comfortable position, as a nation at war, if we had a large alcohol productive capacity which could be diverted on short notice from fuel to defense.

If this is to be the long war military experts predict, with outcome dependent more and more on the weight of munitions that can be manufactured, we no doubt shall arrive at the problems of peace with a plant capacity for ethyl alcohol much greater than at present. Rather than close down the plants and charge off their cost, it would be desirable to have new uses for alcohol waiting to absorb its production. Looking toward that day, it seems logical to push research now in any direction that promises an economic market for alcohol. That market may be in the modification of engine fuels. It is a challenge to chemurgy.

ICE "TAXIS" FOR COLUMBIA RIVER SALMON. Ice and Refrigeration, February: A special salmon "taxi" service with ice tank taxis holding large quantities of ice for cooling the young fish en route have been placed along the Columbia River since erection of the two big dams, at Bonneville, Ore., and Grand Coulee, Wash., which have diverted the stream to some extent. The salmon industry, a \$7,000,000 a year commercial fishing enterprise on this Pacific Northwest stream, is being developed by the re-education plan of the government, which makes use of the ice-cooled taxis to get salmon, notorious for spawning in their own breeding grounds, deeply rooted to tributaries and new flow of the river equipped with climbing ladders and other appurtenances for the fish disturbed in their habitat by the building of the two hydro-electric projects.

Damming of the stream at the two points mentioned has called for a series of eight specially designed tanks, which are ice-cooled and aerated. Chosen fish, worthy of propagation, are selected for rides in these iced taxicabs so that they may be distributed to various tributaries where they may become acclimatized.

Washington, D.C., March 2, 1942

BREAD ENRICHMENT IN CANADA. Editorial note in American Miller, February, on article by L. H. Newman: Bread enrichment in Canada thus far has been led mainly by an agronomist, rather than by nutritional leaders, doctors, and government agency heads as is the case in the United States. Currently there is delay in putting into effect the long-process production of vitamin flour advocated by Dominion Cerealists Newman. Agronomist Newman believes that large scale enriched-bread production and consumption can be effected by development of a white, or whitish flour (as distinct from whole wheat flour) containing certain "natural" vitamin factors in quantities appropriate to the term "enrichment" -- an as yet unofficial term, by the way, in Canada. Although Cerealists Newman's conclusions are at variance with those advanced by many (including British) experts who have traversed the same research ground, American Miller presents an abstract of the latest Newman report.

RESTRICTION ON SOAP IN WARTIME. Business Week, February 14: Soap production is in the position of becoming not a competitor but a byproduct of munitions manufacture. Glycerin is the key to this situation. In normal times more than 90% of glycerin is manufactured as a byproduct of soap-making. Now that our munitions production is demanding huge quantities of glycerin, and with vast new demand from Russia a distinct possibility, the ordinary relationship is reversed and the soap is secondary to the glycerin in importance. Because of this fact, the soap industry is bound to receive especial consideration from the War Production Board. Interruption of the Pacific vegetable oil trade may conceivably reduce soap production (by not more than one-third, according to the best estimates), but WPB will do all it can to hold the reduction to a minimum.

MEAT TENDERNESS NOT AFFECTED BY FREEZING. Coastal Cattleman, February: Studies have been carried on at the Kansas Experiment Station to determine the influence of freezing upon the tenderness of meat. The beef used in the study was obtained from six Hereford steers weighing about 700 pounds each and the pork from good butcher hogs weighing about 250 pounds each. Among the conclusions were the following: (1) Freezing has no influence upon the tenderness in beef that has been aged; however, this may vary among the animals. (2) Considerable variation in tenderness was found among the animals. (3) The right side was found to be significantly more tender than the left side, but no satisfactory explanation can be offered for this finding.

The results of the pork study indicate that freezing does not influence the tenderness of pork, but as in the beef experiment considerable variation in tenderness was found among different animals. Studies conducted on the relative merits of quick and slow frozen meats lend little support to the belief that quick freezing results in maintaining a more palatable product than slow freezing. The results show that the smallest total loss (drip and evaporation) occurred in the quick frozen steak broiled while frozen and the largest loss occurred in the slow frozen, thawed before broiling.

Washington, D.C., March 2, 1942

NEW CORN VS. OLD CORN. Iowa Agriculturist, February: Cattle feeders have long questioned the relative values of new corn and stored corn for cattle feeding. In an effort to settle the question the Iowa Experiment Station has placed five lots of steers on test. These steers are being fed shelled corn of various storing periods. One lot is being fed '37 corn, one '38 corn, one '39, another '40 and the other lot last year's crop. All lots are getting as much corn as they will clean up on twice a day feeding along with 1 pound of linseed oil meal per head per day, 3/4 ounce of mineral, salt self fed and alfalfa hay. According to C.C. Culberston, the steers will be marketed about the last week in June after a feeding period of 210-220 days. These cattle were started on feed in November weighing 720 pounds.

PROCESSING APPLE JUICE. Digest of article from Canadian Chemistry and Process Industries, in Food Industries, February: In tests with apples raised commercially in Canada, two varieties excel particularly in juice quality. Golden Russet gives the best juice of any single variety, while McIntosh gives an excellent unblended juice and has exceptionally full body for blending with other juices. Tolman Sweet and Wealthy apples give inferior juice if used alone, but can be used to excellent advantage in blends. Flash pasteurization is preferable over other methods, being less likely to give the juice a cooked flavor. Much of the natural vitamin C content is lost in pasteurization. Apples may be selected for vitamin C, Baldwin and Spy being best among common varieties grown in Canada. Ben Davis, Winesap, Golden Russet, Gravenstein and King are also good, but Golden Delicious, Delicious, Tolman Sweet and McIntosh are poor in vitamin C.

REFRIGERATION NEEDS OF ARMY. John A. Hawkins, U.S. Quartermaster General Office, in National Provisioner, February 21: During the first World War, canning was the principal method of preserving food. Today camps, posts and stations are equipped with refrigerated storage facilities in some form. The War Department construction manual now provides for a cold storage plant with freezer and cooler service at any point where troop strength is 6,000 or more men. Smaller installations are constructed in Quartermaster warehouses by insulating and partitioning off selected floor areas. Larger overseas bases also are equipped with permanent cold storage plants.

Refrigerated truck trailers for army use have been standardized and are used for distributing perishables to and from truck or railheads. These are constructed for combat zone service - to carry the necessary perishable produce to large units of troops under combat conditions. The Quartermaster Corps is utilizing considerable public cold storage space, particularly at ports of embarkation and centrally located distributing points. The demand for this service will be materially increased with further expansion of our armed forces.

BAN CIVILIAN USE OF GOOSE, DUCK FEATHERS. Office for Emergency Management release (No. WPB 326): The War Production Board, in Order M-102 issued and effective February 24, diverted the entire supply of goose and duck feathers, used in manufacturing sleeping bags, to defense orders.

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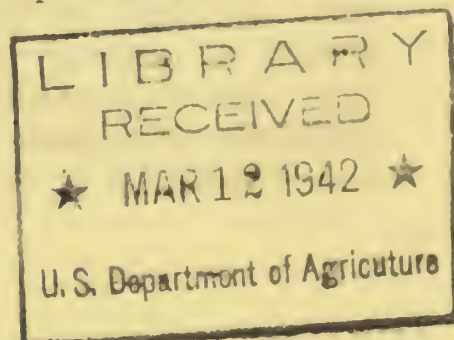
Washington, D.C., March 3, 1942

TRAVEL EXPENSES REVISED. Amendment to the regulations on per diem in lieu of actual expenses; Employees, while traveling on official business and away from their designated posts of duty, shall be allowed, in lieu of their actual expenses for subsistence and all fees or tips to porters and stewards, a per diem allowance not to exceed (a) the rate of \$6.00 within the limits of the continental United States,....and (b) an average of \$7.00 beyond the limits of the continental United States: Provided, that such per diem allowance shall not exceed the rate of \$3.00 while on shipboard when the price of passage includes meals.

USDA APPLE SYRUP, "SUPER-PECTIN." Business Week, February 14: With sugar rationing, some citizens may pour apple juice, condensed to syrup, into their morning coffee. The syrup and a super-sugar-saving pectin for jam and jelly making, also from apples, are among the latest developments of the Department of Agriculture's eastern regional laboratory at Philadelphia. The syrup, manufactured by a comparatively simple process of evaporation, was developed originally to provide the public with a new and different table syrup. Months were spent finding ways to preserve the delicate flavor and prevent the syrup from becoming bland. A reduction of pure apple juice to about one-sixth its weight, the product has a sugar content ranging from 65% to 70%. While the amount of the raw apple syrup which could be made available under the most ideal conditions would total less than 150,000 tons annually, a negligible quantity when stacked up against the nation's yearly sugar consumption, it assumes importance when its sugar-saving qualities are teamed with that of its laboratory mate.

The new pectin, altered chemically by lowering the methyl content and adding calcium salts, is expected to cut jam and jelly sugar requirements by a good 30%; in fact it can produce firm jells without a trace of sugar. Present pectins, which are money- and time- savers in conserving fruit juices and increasing yield, require a 65% sugar solution, but the new product needs only 50% or less, depending on the fruit, to produce palatable preserves. The super-pectin, worked out in joint research with the University of Delaware, can be manufactured with little change or addition to the present equipment of pectin makers.

MORE PROTEIN FOR BRITISH. British civilian animal-protein rations were 27 percent below pre-war levels early in 1941, by the end of the year they were only 5 or 6 percent below as a result of shipments from the United States.



FIRM DEVELOPS SUBSTITUTE RAW MATERIALS. Business Week, February 21: A San Francisco company manufacturing linoleum, paint, and roofing materials made itself independent of raw-material shortages and prices by developing synthetic substitutes. Normally, it is a big user of cork, burlap, aluminum, rags, and imported oils. In general, the substitution program, conducted with the aid of a research department, has made it possible to turn out essentially the same products as in normal times. Substitution of any ingredient in the manufacture of linoleum, paint, and roofing materials calls for compensating changes in other ingredients, but formulas have been perfected to cover any contingency. A feature of the plan is that the finished product under each formula has been thoroughly tested beforehand so that wearing qualities can be readily compared with current prices and availability of ingredients to assure maximum value to consumers. Recently the shortage of India hemp and Scottish woven burlap fiber for linoleum has caused formula changes. At present a considerable percentage of inlaid linoleum is being made with an asphalt-saturated back instead of burlap backing. Since rags from Great Britain, Egypt, and Japan have their individual characteristics, each has been used in definite proportions with domestic rags. Under the new program, it has been found advisable to combine defibered wood with the still-available Argentine rags in order to attain the desired result.

DEVICE BARS MOISTURE IN BOMB-PROOF STORAGES. Refrigerating Engineering, February: The building of bomb-proof shelters and storage rooms has given technicians many problems to solve. One has been the question of how to keep the air in rooms blasted out in rock sufficiently dry to prevent condensations on walls and goods stored therein. The most common method has been to heat and ventilate the rooms. According to information in the Swedish technical press, a new method involving considerably lower operating and maintaining costs has been developed by the well-known Swedish manufacturers of air conditioning and drying installations, A. B. Svenska Flaktfabriken of Stockholm.

This company has designed a dehumidifying unit, in which moisture is extracted from the air through condensation on cold metal surfaces. The surfaces are cooled through a refrigerating compressor, the condenser of which is used for reheating the air. The refrigerator, fans, coils, electric equipment and automatic controls are all built into a compact casing which is easy to handle and install in any locality. In cases where the rooms are intended also as bomb-proof shelters for people, the unit can be used also for ventilating purposes, being then simply switched over to supply heated outside air, heated by means of an electric coil.

SHOE SIZING AND FITTING. Medical Record, February 4: Shoe Sizing and Fitting: An Analysis of Practices and Trends, is the title of Miscellaneous Publication 469 of the U.S. Department of Agriculture. The compiler is Carol Willis Moffett of the Bureau of Home Economics. Topics of main sections include discussions of better fitting footwear, the background of present practices, how last manufacturers arrive at size and fit, how shoe manufacturers influence fit, how retailers interpret fit, consumer attitudes toward size and fit, and measurements, new methods and new standards in size and fit.

FOOD TRANSPORTATION PROBLEMS. Editorial in Market Growers Journal, February 15: Unless drastic changes are made in the present tire rationing, it is likely that trucks will be used only for short hauls. For the most part, growers will use their trucks to move their crops from their farms to the nearest shipping point. Until this year trucks were being used increasingly for moving vegetables as much as several hundred miles. Freight line executives urge that shippers: (1) Order only as many cars as they are certain will be used and then load them the same day they arrive; (2) When it is practicable to make loads heavier than is usually done, shippers are being urged to do so in the interest of conserving refrigerator car capacity.

The grower may join with other growers in his community in appeals to school boards for school vacations during the busiest planting and harvesting seasons. Youths experienced in vegetable growing can help to get food to our fighting men. In the eastern seaboard, vegetable, fruit, and sugar cane producing areas growers will have the assistance of the USDA during the coming season through mobile labor camps equipped to shelter 2,700 migratory farm labor families.

MARKET DEMANDS FOR FRUITS, VEGETABLES. H. P. Stuckey, Director, Griffin (Ga.) Experiment Station, in Southern Agriculturist, February: Many problems connected with the marketing of southern fruits and vegetables can only be studied in the wholesale and retail markets where the products are disposed of, and most of these markets are located entirely outside of the Southern States. New York and Philadelphia last year received about one-third of their supply from six Southern States. The rapid increase in recent years in the volume of southern fruits and vegetables moved by trucks has materially altered the marketing practices in many ways and has created new problems concerning which much new information is needed. The receipts of fresh fruits and vegetables on the Atlanta market in 1939 were 17,679 carloads. Of this 13,121, or 74 percent, came in by motor truck. On the New York and Philadelphia markets the receipts from the six Southern States in 1939 was the equivalent of 17,000 carloads by motor truck or about seven times the figure for 1931.

Interstate barriers have seriously complicated the marketing problems of the South. Fees for out-of-state trucks, growers, etc., so administered as to handicap the marketing of products in adjoining states, and truck weight and length regulations tending to limit produce movement, are two outstanding examples. Freight rate discrimination has the same effect on marketing farm produce as trade barriers.

SELF-SABOTAGE RESTRICTS SUGAR SUPPLY. Food Industries, February: Partly because of unwise hoarding by a few, all will now have to suffer the inconveniences of sugar rationing. And this, in spite of the fact that there is no immediate prospect of a sugar shortage. To prevent further overbuying, the government has had to restrict movements of sugar into consumption during 1942 to, in general, the quantities purchased for delivery for consumption for the corresponding months of 1940.

TO STUDY OPTIMUM DIET. National Provisioner, February 21: A search for the optimum human diet - the balanced intake of foods which will enable human beings to grow best, live longest and enjoy top health - has been started by Anton J. Carlson, University of Chicago physiologist. The four-year study will be undertaken under a nutrition fellowship granted by Swift and Company, it was announced by William H. Taliaferro, dean of the university's division of biological sciences.

Effects of too little and too much food will be studied first by experimentation with laboratory animals. Results from feeding of a thousand animals of similar heredity for four years will yield valuable data on the effect produced by various kinds and amounts of food on health and the life span of the animals. Determination of an optimum diet for animals would be an important step toward determining the optimum diet for man.

SHRUNKEN WHEAT IS GOOD FEED. Poultry Tribune, February: The North Dakota Experiment Station reports (in N. Dak. Agr. Exp. Sta. Bul. 297) the results of a 3-year test in which shrunken wheat was compared with plump wheat in a ration for laying hens. The shrunken wheat used had a test weight of 40 lbs. to the bushel, as a result of drought and rust. The plump wheat had a test weight of 60 lbs.

The three-year average egg production for the lots of White Leghorn pullets receiving 36 percent ground plump wheat in their mash and 50 percent plump whole wheat in their grain was 51 eggs to March 1, and 162 eggs for the entire year. Corresponding figures for the lots receiving shrunken wheat at the same levels were 57 eggs and 165 eggs. The three-year average egg weights were 23.8 and 24.3 ounces per dozen for the plump and shrunken wheat groups, respectively.

HOME-MADE SOAP SAVES FATS AND OILS. Coastal Cattleman, February: Rural families with cooking fats available can save by making home-made soap. M.K. Thornton, agricultural chemist, Texas Extension Service, says enameled or granite ware is suitable for small batches of soap, but for larger batches an iron kettle is recommended. A large granite or wooden spoon is best for stirring. The four ingredients of soap are lye, water, fat and perfume. Lye should be pure and uniform, and if possible soft water should be used since it will improve the quality of soap.

Scents such as oil of citronella, bergamot, oil of lavender, geranium or sassafras may be added to perfume the soap. This will help destroy the odor of the fat. Regardless of what recipe is used, some general precautions should be taken, the extension chemist says. He warns that excess lye forms a hard, crumble soap, while greasy soap indicates a lack of lye.

RECORD ICE CREAM CONSUMPTION IN 1941. Ice and Refrigeration, February: War-time activities apparently increase the nation's appetite for ice cream, says the National Dairy Council, as 1941 estimates indicate an increase of 19 percent in per capita consumption over 1940. Ice cream consumption declined from 1930 to 1933 but has increased rapidly from the 1933 low of 4.72 quarts per person to an estimated 10.61 quarts for 1941, the highest ice cream consumption on record. In 1940 approximately 310,000,000 gallons were produced. Even before the depression, the most ice cream produced was in 1929, 260,000,000 gallons.

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U. S. Department of Agriculture

Washington, D.C., March 4, 1942

IMPROVED DIET INCREASES FOOD CONSUMPTION. Article in Frontiers of Democracy, February 15: If every man, woman, and child in the United States had a diet best adapted to his or her age, work level, sex, and other needs, we should consume domestically 15 percent more butter, 20 percent more milk, 70 percent more tomatoes, citrus fruits and sources of vitamin C, 100 percent more leafy green and yellow vegetables, and 35 percent more eggs. It is our intention, therefore, to improve the nutrition of our own people, and to build up stock piles of food for a post-war starving world, right while we send a billion and a half dollars' worth of food to Britain...

During the war the surplus-disposal device will be kept in operation. The food-stamp, school-lunch, and cheap-milk plans will not lag. Community and school gardens under expert direction will also be encouraged. Last year the school-lunch program actually reached $4 \frac{3}{4}$ million of our 9 million undernourished school children. Of the 67,000 schools receiving surplus commodities 9,000 already had school garden projects and 9,500 school canning projects.

MILK DISTRIBUTION PROBLEMS. C. G. Cushman, Clemson Agricultural College, in Southern Dairy Products Journal, February: Sweeping changes are taking place in the milk distribution business. Reports rapidly coming in from many quarters suggest a five-point program which seems to be in popular favor in the tire, equipment and supplies conservation program in most markets. (1) Every-other-day retail delivery of a two-day milk supply; (2) Daylight deliveries only; (3) Wholesale deliveries six days per week--no Sunday deliveries except to emergency points such as hospitals; (4) A deposit on all bottles of all sizes both wholesale and retail; (5) Elimination of all special deliveries to homes.

FLORISTS COOPERATE TO SAVE RUBBER. Southern Florist, February 27: Worthy of notice among cooperative plans to conserve rubber is one being used by four retail florists in San Antonio. Whenever any shop has deliveries going in a particular direction, the driver phones the other shops to see if anything they have will be ready to go. If so, the truck picks it up and takes it along. This works excellently on funeral and hospital orders, and as a consequence, is saving money and mileage. Frequently a flower truck arrives with sprays from all four florists, and those of the public who have heard of the arrangement think it patriotic.

DAIRY CATTLE CONGRESS. American Milk Review, February: The Thirty-Third Annual Dairy Cattle Congress, National Belgian Horse Show and Allied Exhibits, will be held September 28 to October 4, 1942 at its permanent home in Waterloo, Iowa. This nationally known exposition comes after most of the leading state fairs have been held, thus making it convenient for the better herds to be shown. The theme of the exposition will be "The Dairy Industry in the National Defense Program." E. S. Estel is secretary-manager of the Congress with headquarters in Waterloo.

March 4, 1942

CALCIUM CARBIDE FORCES PINEAPPLE BLOOM. Science Service release, February 20: Putting calcium carbide on pineapple plants to force them into bloom is the device used by planters of tropical Australia. Secret of the technique is the fact that calcium carbide is the parent stuff of acetylene, which evolves as a gas when the carbide is moistened. Acetylene is one of the hydrocarbon gases used to stimulate plant processes, including blossoming. The Queensland planters, however, found it unnecessary to go to the somewhat expensive bother of gas-treating their pineapples. They merely drop bits of calcium carbide into the heart of the leaf cluster when the plant is in bud, and the first rain; or even heavy dew, causes the evolution of the acetylene. Care has to be exercised in the treatment, because too much carbide burns the plant, too little produces no results. Experience indicates the right amount.

COLCHICINE TREATMENT FOR SESAME SEEDS. Science Service release, February 19: Because sesame is an important food-oil plant in warmer lands, there is possible economic importance in the experiments of D. G. Langham, Instituto Experimental de Agricultura y Cria at El Valle, Caracas, Venezuela. He has succeeded in obtaining new strains of sesame with much larger oil-containing seeds by treating standard strains with colchicine, heredity-changing drug. The new strains, which have double the chromosome number of the old, produce approximately equal numbers of seeds with comparable specimens of the ancestral varieties; but the seeds are on the average 56% larger. There are also several outstanding changes in the plant structure generally. Prof. Langham reports briefly on his work in Science.

OPA DIVISIONS REORGANIZED. Washington Post, March 4: Price Administrator Leon Henderson last night announced a reorganization of executive personnel and divisions of OPA "to meet expanded responsibilities arising from the new Price Control Act and the rationing powers vested in his agency by the War Production Board." Principal changes, effective immediately, call for break-down of the price division into four units dealing with food and apparel; industrials and equipment; general products; and fuel. Howard Tolley, on loan from his position as chief of the Bureau of Agricultural Economics, heads the new food and apparel division. The new rent division will be in charge of Paul A. Porter (formerly of USDA). Harold Rowe (formerly of USDA) will have executive responsibility for food rationing.

"BONDERIZING" RUST-PROOFS STEEL, TIN. Business Week, February 14: Bonderizing, a patented process developed by a Detroit Company, gets its name from its first use--putting a rustproof "bond" on steel automobile bodies and parts for subsequent enameling or lacquering. The new surface is not only rust- and corrosion-resistant to a high degree, but resistant to under-surface corrosion, when the covering lacquer or enamel is scratched through.

Despite the fact that can makers are not entirely sure that bonderizing will stand up like a heavy coating of tin against tomatoes, corn, kraut, and certain other obstreperous canned products, they feel that there are hundreds of more benign items that will remain tractably in combination tin plate-bonderized cans. Some volume items like paint, oil, tobacco, shoe polish, and coffee may very well go into untinned, unbonderized black sheet cans--if WPB does not demand that they and others be packaged in non-metallic containers.

March 4, 1942

FARMERS BUILD OWN IMPLEMENTS. Better Fruit, February: Many western farmers are finding it possible to build some of their own farm implements out of old parts available and thus avoid unnecessary purchases in these times of equipment scarcity. This is particularly true in regard to implements that will help control erosion and conserve moisture, according to Soil Conservation Service and state extension specialists.

One such implement used in some sections for making trashy fallow is the mold-boardless plow. This is fashioned by taking the moldboards entirely off a regular plow or by cutting them down to stubby moldboards that do not turn the furrow slice completely over. Another implement known as a chisel used for sub-soiling and breaking up hardpan is being made by a number of farmers out of old plow frames. Home forged chisel points bolted onto the plow beams are used.

ILLINOIS HAS 16,000 CO-OP LOCKERS. Locker Operator, February: In 40 Cooperative Frozen food locker plants in Illinois, a total of 16,600 lockers are now in use. The average patron puts 580 pounds of meat through his locker annually. The total amount of meat amounts to approximately 9,500,000 pounds. Large amounts of fruits and vegetables are also stored in these lockers.

That this development of cooperative lockers in the state has led to considerable economies for consumers is apparent from the study of Earl C. Hedlund, University of Illinois, entitled, "What Does it Cost to Distribute Food?" He studied the marketing of 58 food products; found that on the average, in the years 1935-1940 inclusive, producers received only 42.3 percent of the consumer's dollar. The other 57.7 percent included the margins of retailers, wholesalers, packers, and transportation agencies.

FERTILIZER TAG SALES. American Fertilizer, February 14: Farmers have been asked this year to cooperate in the war effort by buying their fertilizer early, helping to prevent a congestion in transportation facilities later on when war materials will be moving in an ever increasing volume. Proof that farmers are following an early buying program is furnished by the data on fertilizer tax tag sales in January. Aggregate sales in the 17 reporting States were two and a third times as large as in January, 1941. They amounted to 1,273,000 tons, a quantity which is normally not reached until March.

Such a large tonnage does not, of course, represent buying for immediate use, as actual consumption in the first several weeks of the year is very small. The spring requirements are being taken care of early, and the abnormally heavy sales in January mean that sales in later months will be smaller than they would be otherwise.

CONTROL OF COLORED FIBRE BLENDS. Canadian Textile Journal, February 13: Modern application of colourimetry in the textile trade makes it possible to determine, first, whether available fibres can be used to match a given shade, and secondly, the proportion of each required to secure the match, according to S. Q. Duntley in a paper on "Coloured Fibre Blends" before the American Association of Textile Chemists and Colorists. Dr. Duntley states that the method of predicting and controlling coloured fibre blends by optical means is past the laboratory stage and has been properly applied to full scale production problems and is now in daily use. The method requires a colourimeter or spectrophotometer.

March 4, 1942

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ORANGE MARMALADE WITH/VITAMIN C CONTENT. Sedky, Fellers, and Esselen, Jr., Massachusetts State College, in Fruit Products Journal, February: report an improved method of making orange marmalade with high vitamin C content and excellent flavor. The use of cooked peel protects the juice from the detrimental effect of prolonged cooking and thus retains the color, flavor, and vitamin C content of the juice. The use of dextrose up to 25 percent as a part of the added sugar lessened the sweetness of the product and contributed to the flavor, but the resulting marmalade was firmer in texture. The use of an orange concentrate made it possible to reduce the time needed for the preparation of the marmalade, thus allowing greater protection of vitamin C content and flavor. A survey of commercial orange marmalades showed them to be relatively low in vitamin C. Their ascorbic acid content varied from 2.1 to 6.3 mgm. per 100 gm. In comparison with these figures the orange marmalade described in this paper contained from 17.5 to 29.2 mgm. ascorbic acid per 100 gm.

BABCOCK HEADS U.S. FARM CO-OP COUNCIL. Pure Milk, February: The new president of the National Council of Farmer Cooperatives is H.E. Babcock, Ithaca, New York, director of the School of Co-operative Administration and one of the nation's foremost co-operative leaders. On February 2 he was named to the Roll of Honor at the University of Wisconsin's Farm & Home Week, the only out-of-state person so honored. Dr. Babcock is chairman of the Board of Regents of Cornell University and was formerly general manager of the Co-operative G. L. F. Exchange, Inc. at Ithaca, one of the largest farm supply purchasing co-operatives in the country. He resigned a few years ago to devote his time to developing an educational system for managers and other employees of agricultural co-operatives.

SUPERIORITY FACTOR IN BUTTERFAT. Editorial in Dairy World, February: Scientists at the University of Wisconsin have been carrying on a series of studies over a period of years in an effort to learn about the unknown factor which makes butterfat superior to all other fats in promoting growth in laboratory animals. It has long been known that butterfat is the only food fat that contains the important vitamin A naturally in significant amounts, and it is now known that butterfat also contains something else that is vitally essential in the promotion of growth. What this growth promoting factor consists of is not known. This discovery is of outstanding importance to the dairy industry in promoting the consumption of milk, butter, cream, ice cream, and all dairy products containing butterfat.

QUICK FROZEN EVISCERATED POULTRY. Editorial in Quick Frozen Foods, February: The U.S. Quartermaster Corps, big buyers of quick frozen eviscerated poultry, has made the following statement: "Eviscerated poultry fills a great need in the Army set-up. While the price of eviscerated is greater per pound than undrawn, the saving in man hours, freight and greater sanitation of kitchens, more than compensates for the extra cost. Undrawn poultry, while meeting Army specifications, does not compare in taste to that drawn at killing."

DAILY DIGEST

Prepared by the Press Service for the use of USDA employees. Views and opinions in these items are not necessarily approved by the Department of Agriculture.

Washington, D.C., March 5, 1942

INSECT PREVENTION SAVES MONEY. Texas Extension Service: By way of examples in insect prevention, Cameron Siddall, Extension entomologist, says that 56,197 farmers in Texas in 1941 followed recommendations for controlling cotton insects in accordance with recommendations of county agricultural agents. Control measures were applied on 411,902 acres, using 4,337,182 pounds of sulphur and calcium arsenate for insecticides. Farmers report a saving of \$2,349,950 by carrying out the recommendations.

Twenty result demonstrations of cotton insect control were achieved in 1941. An average of 13.1 acres were dusted and 3.8 acres left undusted as a check. The consequences were the production of 714 pounds of seed cotton per acre on the dusted plots and 506 on the undusted check. The gross value of the 208 pounds spread was \$14.30. The demonstrators averaged four applications, using calcium arsenate and sulphur, or the mixture of them. The total all-over cost of control per acre was \$3.24. The cost of picking and ginning the additional cotton produced by control measures averaged \$2.51, giving a net profit of \$8.45 an acre.

LIME-SULPHUR-OIL DORMANT SPRAY. Better Fruit, February: The combination lime-sulphur and oil dormant oil spray approved by entomologists of the Pacific Northwest tentatively last year is being recommended by them for apples and pears without reservations this season. E.J. Newcomer, federal entomologist in charge of the Yakima laboratory of the Bureau of Entomology and Plant Quarantine, says that tests last year on apples and pears were satisfactory and the use of the combination will mean a saving to the growers.

Use of one gallon of dormant oil emulsion with three gallons of lime-sulphur is effective for San Jose scale and apparently for the blister mite. When used separately, 10 gallons of lime-sulphur or four gallons of oil are required, and the tests showed that the combination saved one-third. Newcomer advises that the spray be applied while the trees are dormant since there is danger of injury to foliage if applied after leaf growth has started. He suggests that it be withheld from soft fruits since not enough is known as to the effect on such trees. In the instance of peaches, the control of the peach aphid and the twig borer must be considered, and the value of the combination for their control is not known.

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March 5, 1942

U.S. PLANNING BOARD IN WAR-TIME. Article in Frontiers of Democracy, February 15: The regular activities of the National Resources Planning Board continue along with its operation for the special responsibilities of post-war and war-time planning. These activities include the development of policy statements and programs to facilitate advance planning for national resources at all times; recommendation of measures leading to the improvement and stabilization of economic conditions; current reporting of trends of business activity and employment. To provide a basis for such work, it conducts studies of employment trends, consumer incomes and expenditures, long-range work and relief needs, business and industrial research, and problems in the field of land, water, energy and other national resources.

In carrying out the provisions of the Employment Stabilization Act of 1931, the Board's "regular" activities include the development and annual revision of six-year programs of public works; collection of information concerning advance construction plans and estimates by all Federal agencies, the States, municipalities, and other public and private agencies, and listing for the President and the Congress all proposed public works in the order of their relative importance with respect to (a) the greatest good to the greatest number of people, (b) the emergency necessities of the Nation, and (c) the social, economic, and cultural advancement of the people of the United States.

THE LANGUAGES OF SCIENCE. Medical Record, February 18: Science speaks two languages. One of these is a technical language, a rather formidable terminology of carefully defined terms that scientists speak to one another. The other is, or should be, clear English in which scientists are obligated periodically to address laymen about their work. In recent years the technical language of science has developed to the point where specialists in different fields are actually able to talk about the same facts and concepts in totally different terminologies. Hence what is essentially a cult of unintelligibility has appeared.

Scientists not only make themselves understood rather imperfectly to laymen but they fail effectively and freely to communicate with one another. Such almost deliberate obscurity thus impedes scientific progress both directly and indirectly. The sin is not one indulged in only by young scientists anxious to parade newly learned vocabularies. For scientific papers delivered by distinguished authorities at professional meetings are often couched in technical language so obscure that other workers in the same subject understand them with difficulty. This has brought protest from outstanding British and American men of science.

STUDY ON BHE NUTRITION "YARDSTICK." Dairy World, February: To determine just what food price increases mean to the average family, the National Dairy Council made a study of food standards as outlined in "Planning Diets by the New Yardstick of Good Nutrition" by the Bureau of Home Economics. Foods recommended for "A Moderate Cost Adequate Diet" were studied.

March 5, 1942

WEATHER CONTINUES UNFAVORABLE TO CROPS. Weekly Weather and Crop Bulletin, March 4: Persistent cold weather and wet soil in considerable areas made another unfavorable week for outside operations on farms, and field work was largely at a standstill in most sections of the country. In the South, truck crops made slow progress and there was little further planting. Little actual damage from low temperatures is reported, except that heavy frost in the Florida Everglades caused extensive loss of snap beans and considerable to young tomato plants. Abnormally low temperatures prevented development of early fruit trees, although early buds have been badly frosted in the Paonia district of Colorado. High winds in Florida blew from the trees nearly half of the tree-ripe oranges and grapefruit, which removes them from the fresh fruit market, but they will be available for local canners; valencias were not affected. Fifteen hundred cars is a rough tentative estimate of fruit blown down.

In the Southwest, rain in New Mexico and central and southern Texas was helpful, but drought continues in the western and northwestern portions of the latter State. Additional moisture was helpful in the middle Atlantic area, where accumulated precipitation has been deficient. In the upper Mississippi Valley the soil is thoroughly saturated, especially in Iowa, and a long period of dry weather is needed; less moving of farm tenants is reported from Iowa.

In the Pacific States frost damaged early almonds and apricots in the interior of California and temperatures were too low for good growth of truck; considerable damage to the citrus crop and new tree growth by the cold weather in February is more evident in the Los Angeles area. The weather was decidedly unfavorable for livestock over most of the great western grazing area. There was local loss of lambs and more or less shrinkage and loss in weight to older stock, but little loss of life.

EQUIPMENT FOR SUBSURFACE TILLAGE. H. A. Morehead, International Harvester Company, in paper in Agricultural Engineering, February: The surface mulching program should be tried experimentally in all localities before it is recommended too strongly. It is a local problem, and I believe in recommending only such farm practices as the average farmer can and will follow after he has been shown. Varying soil and crop conditions must be handled by different practices. I do not believe, at this time, that we can handle a wet gumbo soil by using a surface mulch, because this soil dries out very slowly in the spring, and in an average rainfall year this ground must be farmed when it is still too wet, as far as average farm practice is concerned. Experimental equipment is being tried in the Nebraska area. We have found that the farmer is more willing to try new methods if it doesn't cost too much, so we have some experimental equipment to use on a regular direct-connected lister. This lister is owned by many farmers at this time, so they would be required to buy only the additional tool bar and ground-working equipment.

SAVING MOLASSES IN WARTIME. Clinton Creston, in American Miller, February, gives practical suggestions on saving molasses in feeds. Among them is increased feeding of barley, wheat bran, and old-process linseed meal because all three are notably palatable to all classes of livestock and poultry. All three have a definite tonic or conditioning value. The emergency will cause a new appreciation of corn, oats, wheat, middlings and many other feeds. By mixing the palatable ingredients dry even at increased cost, which the traffic can stand at present, there should be use made of whatever molasses is available to "cover up" the unpalatable grains although the "cover" need not be so thick as at present in many cases.

March 5, 1942

BACE WESLACO, TEXAS, LABORATORY. Editor's article in Texas Farming and Citriculture, February: Canning in the Lower Rio Grande Valley has been a development of great economic importance to this area. A decade ago the Lower Valley had only four or five canneries, and these were relatively small. Now there are nearly ten times as many, and most of them have thoroughly modern equipment and selling connections of national scope. Two reasons were the establishment by the Federal Government of a by-products laboratory at Weslaco, Texas, in which processing methods best adapted to the available products have been ably worked out and placed at the disposal of the canners, thus saving them much time and money and facilitating in general their entrance into the Lower Valley canning field; the valuable activities of the agronomists at the Valley Experiment Station in determining the best cultural methods under the special conditions here for fruit and vegetables most suitable for canning.

"SQUASH" SYRUPS POPULAR WITH BRITISH. W.V. Cruess, California College of Agriculture, in article on fruit concentrates, in Fruit Products Journal, February: In Great Britain and elsewhere in the British Empire fruit "squashes" are very popular. These are made by diluting fruit syrups with plain or carbonated water with or without the addition of a little "Scotch" or brandy. The syrups in turn are made by adding sugar to the fresh juices to give a Balling or Brix degree of about 70. As a result of V.L.S. Charley's work at Long Ashton (England) it is now customary to pretreat berry juices with a pectin enzyme to prevent jellying of the syrups. Orange, lime, lemon, grapefruit, pineapple, raspberry, loganberry and strawberry syrups were encountered in London stores in 1938 and 1939. In Cairo mango and papaya squash syrups, in addition to the citrus and strawberry syrups, were popular. At one time similar syrups were fairly common in America, particularly in soda fountains, but it is our impression that they have been replaced in large measure by fresh citrus drinks and by canned juices.

NITRATE OF SODA RATIONING. American Fertilizer, February 14, commenting on WPB rationing plan for nitrate of soda: Nitrate released in February in South Carolina for oats, for example, should not be saved for cotton or permitted to get into the hands of a farmer who will not need it until next May or June. Farmers must remember that sizable stocks are on hand in the United States and additional supplies are coming in from Chile. Equitable allocations will be made for the cotton farmers and the corn farmers when the proper time comes.

It seems assured that supplies of mixed fertilizers, phosphates, and potash salts will be as large this spring as last. Nitrate of soda, used principally for side-dressing, is somewhat short, but it is almost certain that at least 50 percent of the normal supply will be available and enough may be brought in to make up a 90 percent supply before the season is over.

CONTRA COSTA CANAL. Business Week, February 28: Almost completed, the 46-mile long Contra Costa Canal, a part of California's \$170,000,000 Central Valley project, will soon be delivering fresh water taken from the Sacramento River at a point above the salt-water line, to farms and towns in the upper San Francisco Bay region where brackish water has been a problem to industrial and agricultural interests. The upper portion of the canal, which carries 350 sec. ft. of water, is in use.

DAILY DIGEST

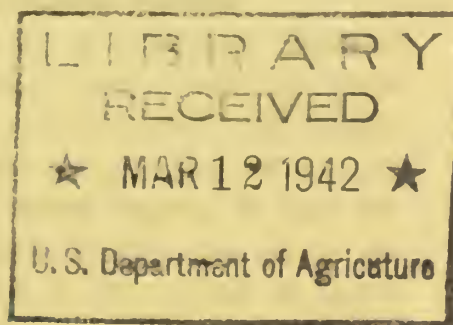
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Washington, D.C., March 6, 1942

LOCAL BOARDS WILL INDUCT SSS REGISTRANTS. Selective Service System release (No. 256): Registrants for Selective Service, who have been deferred because of dependents but are otherwise eligible for military service, volunteering for officer candidate training will be inducted into the army through their local boards, Brig. Gen. Lewis B. Hershey, Director, has announced. Such volunteers will be given four months training in the ranks to determine if they are potential prospects for commissions. Any not recommended for an officer candidate school at the end of this period may request to be transferred to the Enlisted Reserve, and not be subject to call for active service unless registrants having similar dependency claims are being called. Registrants who try for a commission must be American citizens with at least four years high school education. Local boards may reject applications of any who should be deferred as "necessary men" in war production. Volunteers who are under 21 years of age must obtain the written consent of their parents or guardians. A registrant desiring to volunteer for officer candidate training should apply to his local board. Travel expenses must be defrayed by the volunteer.

FARMING IN BRAZIL. The Fruit Industry of Brazil (Foreign Agriculture Report No. 2): Brazil as a farming country offers unlimited possibilities as far as the ability to produce is concerned. In the tropical zones many crops are raised without much effort on the part of the producer. Fruits and nuts are grown in abundance, but largely under natural conditions and do not enter ordinary marketing channels. The staple crops that constitute an important part of world commerce are cacao, cotton, tobacco, and sugar. Farming in Brazil is not on a highly scientific basis; most of the land is heavily exploited. The best lands are given over to coffee and cropped until they begin to wear out. The planter then sells and moves to virgin soil. The old farm is planted to citrus, cane, or pasture.

In many respects Brazil, agriculturally, is developing along the same lines that were followed in the United States. The one-crop system is pursued until the land begins to run down or is worn out. Since there is much good land available at low cost, this procedure is likely to continue for years to come. State and Government officials give demonstrations in soil conservation and soil management and are doing what they can toward educating the people in better farming methods. Results so far, however, have not been far reaching.



March 6, 1942

THE LANGUAGES OF SCIENCE. Medical Record, February 13: The future of our democratic society depends largely upon our ability to link administrative power with verifiable scientific knowledge. However, this combination can only be attained when scientific workers are aroused to their wider responsibilities. So long as men who are outstanding, who are nationally and internationally recognized authorities in particular branches of knowledge, cannot give a lecture, prepare an article, or make a presentation that can be understood by ordinary people, so long the status of research must remain in permanent jeopardy. When scientific workers more fully understand the social and economic implications of their findings, and can make effective presentations of the relation their work bears to broad policy, their representations will receive fair hearing.

If scientists cannot be induced to do this themselves, someone else simply must perform that function for them. For the public must, first of all, be informed about science if research is to be preserved. It must learn to know the spirit and the method of science, and to cease regarding research as a sort of legerdemain,--a new mysticism heightened by a rigamarole of complex terminology or, worst of all, a new infallibility. For it is the general public that financially supports all scientific endeavor, and it certainly cannot be expected to endow in perpetuity an esoteric cult it cannot fathom.

OAT FLOUR DERIVATIVE PRESERVES FRESH FISH. Ice and Refrigeration, February: A large market demand for fresh fish and the necessity of providing some means for keeping it fresh has inspired research by scientists in an effort to find economical and practical methods of prolonging the quality and flavor of freshness in this highly perishable food. There is now available on the market a derivative of oat flour produced in both powder and liquid form. As a preservative of milk, ice cream, butter, etc., it has shown surprising results in maintaining quality. According to an article in the Canadian Fisherman experiments have been undertaken recently by a Toronto wholesale firm. At the end of seven days the untreated fish were unfit for use, but at the end of nine days the treated fish could be sold at retail.

The product has already had considerable use in the dairy industry, the treatment of parchment paper for the wrapping of butter, also for the dusting of potato chips and roasted nuts, and the treatment of certain types of candies, particularly those containing fats. It is also used for preservation of butter and in the manufacture of ice cream, where it is claimed to retard development of off flavors from oxidation of foods resulting in the familar "tallowy" taste.

COLOR SIGNAL FOR FEED BAG LABELS. American Miller, February: Although about the usual volume of color-printed feed bags are being used, many millers are giving up the printing of millfeed bags on account of scarcity developing in fabrics for millfeed containers. At the same time, state regulations must be met by the analysis tag statements. The proposal to use a color code on such tags is excellent--and should be put in effect as soon as practicable. Thus, green tags would denote standard middlings, orange tags wheat bran, pink for gray shorts, red for red dog, etc.

March 6, 1942

RIO GRANDE COTTON REPORT. Texas Farming and Citriculture, February, quotes from a summary of a 1941 report on cotton growing, prepared by W.H. Friend, Superintendent of the Weslaco (Tex.) experimental substation. "Regional variety tests have demonstrated that good yields of cotton can be produced under adverse weather conditions provided the grower uses well adapted, early fruiting varieties and follows good farming practices that include crop rotation and crop protection.....The spectacular showing made by Coker cottons during the 1941 season should not cause the Lower Rio Grande Valley growers to lose faith in varieties like Stoneville 2B, D. and P. L. and Delfos, but should serve to demonstrate the necessity for being constantly on the alert for improved varieties that may fill our needs better than some of the old favorites."

SIMPLIFIED WIDE-MOUTH JARS PLAN. Editorial in Fruit Products Journal, February: At the conventions in Chicago recently of preservers, pickle packers, etc., W.E. Braithwaite, Division of Simplified Practice of the U.S. Department of Commerce, presented blue prints and samples of the new standard glass jar for packing such products as preserves, jams, jellies, fruit butters, peanut butter, mustard, mayonnaise, pickles, relishes and mince meat. The jar was designated by the Design and Specification Committee of the Glass Container Association at the request of the Department, following request of the O.P.M. for a streamlined simplification program to save essential materials and secure maximum efficiency in production. Adoption of the jar by the industry will do away with special designs.

This is the first step in a general schedule which will incorporate other products. Details are now being worked out on a container for such products as fruits and vegetables, fruit juices, etc. Eleven sizes are covered in the blue-prints, and Mr. Braithwaite asked the industry's help in bringing the program into operation as soon as possible.

BY-PRODUCTS FROM AVOCADOS. Business Week, February 28: The calavo growers of California, a cooperative avocado marketing group, with a bumper crop of some 35,000,000 pounds on hand, are interested in recent inquiries on possible use of avocado oil as a new vegetable shortening and substitute for olive oil, especially in view of cumulative reduction of imports and potential shortages of some domestic oils. Avocado oil has a digestibility coefficient of 92%, which places it on a par with butter in that respect. Since it has plenty of Vitamin D, enough to be classed as a protective against rickets, and hasn't the odor and unpleasant taste of many fish oils it is well suited to displace them, calavo researchers believe.

In 1929, calavo growers entered the byproduct field experimentally by producing a preserved pulp of the fresh avocado for use as flavoring in ice cream and in bread-making. The pulp was kept frozen to prevent decay, was held in a solution of lemon juice or vinegar. This product was soon replaced by the extracted oil, used most widely in bread-making, principally as a nutritional ingredient, but not as a shortening. The oil came to the attention of essential oil dealers in England as a new base in the manufacture of cosmetics. Since the beginning of the war, there has been renewed interest in the United States both on the part of the manufacturers of cosmetics and California bakers. Domestic cosmetic houses have been interested, primarily because of potential shortages of imported oil, plus the fact that these oils have risen in price to approximate more nearly the relatively high price of the avocado oil.

March 6, 1942

MILK FLUSH FOR CHICKENS. M.W. Emmel, Florida Experiment Station, in Coastal Cattleman, February: The Milk Flush has become popular with poultrymen for the treatment of various diseases of chickens: Dried buttermilk, skimmilk, or whey added to the regular feed may be used for this purpose. Dried products are used, as the water content of wet products reduces the intake of the active ingredients and the flushing action is not obtained. The active ingredient of dried milk products is lactose (milk sugar) which is readily fermented by desirable bacteria in the intestinal tract of the bird. Dried milk products vary considerably in their lactose content. Dried buttermilk contains from 45 to 53 per cent of lactose, depending upon the sourness of the cream before it was churned. Dried skimmilk contains approximately 49 percent of lactose. Dried whey contains approximately 70 percent of lactose. Milk sugar is a dried whey product which must contain 70 percent of lactose to meet the requirements of the U.S. Bureau of Standards.

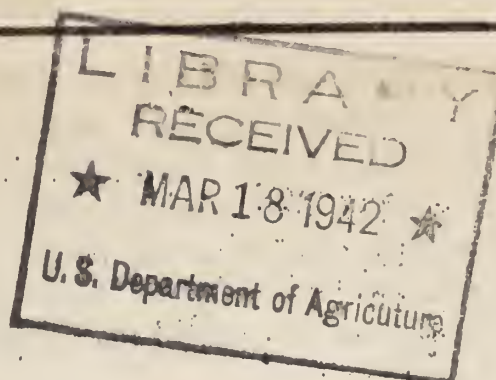
TUSKEGEE PUBLICATION FEATURES FOOD FOR FREEDOM. The March issue of Service magazine published by Tuskegee Institute and devoted largely to informing and inspiring Negroes engaged in catering, hotel, and laundry work, is dedicated to the Food-for-Freedom program. Among Department representatives who wrote articles for the edition are Secretary Wickard, Philip Dodge, SMA, and Sherman Briscoe, Office of Information. Albon L. Holsey, AAA administrative officer, with headquarters at Tuskegee, served as technical adviser to Nat D. Williams, acting editor of Service.

PAN-AMERICAN AGRICULTURAL COOPERATION. E.N. Bressman, Office of Coordinator of Inter-American affairs, in article on projects in inter-American agricultural cooperation, in Bulletin of Pan American Union, February: Many apparently envisage the proposed Institute of Tropical Agriculture as an organizing center. As such, it would attempt to determine where a given piece of work should be carried on rather than how. This would imply a traffic-managing and standardizing institution concerned with determining what research and leadership training is required and which of the existing institutions and agencies can best carry out the various jobs indicated.

If the Institute is to assure an economic base for cultural activities, it will have to distribute its effectiveness over the tropical area. An academic island isolated from the varying problems of the respective tropical regions would be just another institution. It would have little opportunity to supply the continuity of effort that is urgently required or to relate technical discoveries to desirable changes in human relationships. However, such a position will have to be won through the effectiveness of the program developed. To expect the Institute to establish itself through abstract endeavors would be largely visionary and would invite failure. An adequate physical plant and a concrete program of research and personnel training is essential to the creation of that esprit de corps which will carry the Institute through its formative days.

DAILY DIGEST

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Washington, D.C., March 9, 1942

BLACKOUT BULB DEVELOPED. Fruit Products Journal, February: Designed for blackout lighting in air raids, a new blackout bulb announced by a corporation of Brooklyn, N.Y., provides downlighting in a soft beam of blue light that is safe for indoor visibility during blackouts. The bulb is lined inside with a pure silver reflector lining that hides all filament glare and projects the light downward. Light leaks are prevented by a black silicate coating that covers the bulb up to the extreme lighting end which is a deep blue. The new bulb consumes 25 watts and will list at 45c.

N.Y.C. TRUCK TERMINAL URGED. American Egg and Poultry Review, February: To eliminate costly and inefficient features in the present trucking system in New York City, a \$2,000,000 union motor truck terminal has been proposed by the Port of New York Authority. Long-distance truckers from various points coming into the city would go immediately to the terminal, unload all shipments there, and be released promptly for further long-distance service. From the central station local delivery trucks would make deliveries under a system employing consolidated freight zones, which would greatly reduce the number of partially loaded trucks at steamship piers. Motor trucks on an average bring 30,000 tons of goods into New York City and carry away approximately the same amount, and in Manhattan the in-and-out trucking volume now exceeds that handled by rail, the Authority's study disclosed.

TO SALVAGE LEAD AND TIN FOIL. New York City report in Western Tobacco Journal, February 24: Every retail tobacco dealer must realize the need to salvage all possible lead and tin foil, which can be collected from discarded cigarette packages and particularly from pocket size packages of smoking tobaccos. Clarence Low, Chairman of the New York City Salvage Committee proposes to tackle the problem of collection of this salvage material by the formation of salvage wardens in every block in the city. They will make a house to house and store to store canvas to inform the householder and storekeeper of centrally located depots for depositing waste materials. Low's plan has proved successful thus far, and undoubtedly will serve as a pattern for municipalities and states in other parts of the country. His work is undertaken as a division under the Bureau of Industrial Conservation of the War Production Board.

March 9, 1942

THE LANGUAGES OF SCIENCE. Medical Record, February 18: The continued advancement of science depends upon the financial encouragement of research. This in turn depends upon informed public opinion. The problem is largely an educational one. The public must be shown the potentialities of science, as well as be given packets of immediately useful practical information. It cannot otherwise appreciate the need for more and more research, especially when some signs seem to indicate that we have done more research than is good for us already.

That the scientific work of the Department of Agriculture, for instance, is not always thoroughly understood by the taxpaying public becomes not infrequently evident in the form of adverse criticism. But the speakers and writers who make attacks upon the Department's scientific and regulatory work do so mainly because they are ignorant of the significance and potentialities of this work. Such critics cannot be rebuked, for the fault is not their own. It inheres in the research institution's inability to inform them fully.....Quite properly the organic act founding the Department of Agriculture bade that institution disseminate as well as merely acquire knowledge about agriculture in the broadest sense of the term. The discovery and the diffusion of knowledge should not be compartmentalized processes. They are integral parts of a single whole.

LATIN AMERICAN COLONIZATION. Article on recent social legislation in Latin America, in Bulletin of Pan American Union, February: The Argentine colonization law of 1940 created the National Agrarian Council, which will put into effect a national program. The principal functions of the Council are to plan for the question of rural property grants throughout the nation; to organize a campaign to increase the population of the country; to recommend transfers of farmers living on marginal lands to more productive areas and to develop family, communal, and Indian colonization.

In Brazil, a law of 1941 empowers the federal government, through the Ministry of Agriculture and with the cooperation of the states and the municipalities, to establish agricultural colonies where Brazilian citizens and immigrant farmers may have an opportunity to become rural property owners.

The policy of the Paraguayan Agrarian Reform Law, authorizing the government to put lands, seeds, and tools for farm work at the disposal of every farmer, was extended in 1941, to provide for repatriated citizens, urban residents in need because of the scarcity of work, and for farmers lacking sufficient funds to tide them through the period between planting and harvest. The Department of Lands and Colonization will organize school-colonies for these citizens where they will receive a year's training to make them eligible to own a plot in an agricultural colony. The government on the same date decreed that in every village throughout the country a "Farmer's House" (Casa del Agricultor) should be organized, to consist of a branch of the Agricultural Bank of Paraguay and agencies of various government bureaus concerned with agriculture and colonization.

ARTICLES IN "FREE WORLD." March Free World contains the following articles: Economic Basis of Inter-American Relations, by Vice President Henry A. Wallace; Agricultural Resources—The United Nations vs. the Axis, by George B.L. Arner; FAR; and Ill-Fed People Are Not Free, by T. Swann Harding, Office of Information.

March 9, 1942

PROPOSE FOOD STOCKS AT INTERIOR POINTS. New York Journal of Commerce, March 6: Food trade interests, seeking to relieve pressure on warehouse facilities at seaboard and to spread reserve stocks of food at interior points not vulnerable to enemy attack, have filed a petition with western railroads for revision in freight tariff schedules to permit storage in transit for canned foods eastbound from the Pacific Coast. The proposal, filed by Francis Leggett & Company, Inc., wholesale grocers of New York, comes before the Standing Rate Committee of the Transcontinental Freight Bureau today in Chicago for a hearing.

Supporting proposed revisions are a number of packers' and distributors' organizations, including the National-American Wholesale Grocers Association, National Retailer-Owned Grocers, Inc., Apple Growers Association of Hood River, Oregon, New York State Wholesale Grocers Association, and corporations in canning and distributing fields. The Office of Defense Transportation is studying the proposal, which has also enlisted favorable consideration of the U.S. Department of Agriculture.

Primary objective of the proposed revision is to ease pressure on warehouse facilities at important coast points on the Pacific and Atlantic seaboard. A number of warehouses normally used for canned foods have been taken over by the Army and Navy for war uses.

FOOD LOCKERS WITH OTHER BUSINESSES. Ice and Refrigeration, February: Although many frozen food locker plants are being established as separate businesses, Wisconsin has one county, Brown, in which locker plants originated in the state about eleven years ago, in which only about half a dozen plants are operated separately. There are 42 locker plants in Brown county, most of them around Green Bay, in an important cheese manufacturing district. These 42 plants, including the half dozen which are probably separate enterprises but which have not been visited, are divided as to business connections as follows: cheese factories, 20; cold storage plants, four; creameries, four; meat markets, two; general stores, two; co-op dairies, one; milk farm, one; ice plant, one; milk plant, one; fish market, one; others, five. Cheese factories, creameries and ice cream plants appear to predominate as establishments of which locker plants are adjuncts, as all such enterprises use refrigeration, and all that is necessary to start a locker plant is to add an extra room, properly insulated.

DEFENSE ORDERS ON TEXTILES. Office for Emergency Management releases: For conservation, simplification of men's and boys' wool suits and overcoats was ordered by the Division of Industry Operations in M-73-a, effective March 30 for all clothing manufacturers except tailors-to-the-trade, for whom the deadline will be May 30 (WPB 406). Preference ratings available for deliveries of materials to producers of spare parts for textile equipment were raised from A-10 to A-8 by an amendment to Order P-53, effective February 28 (WPB 409). Organization of a Woolen Floor Covering Industry Advisory Committee was announced. Rayon producers were directed to make available to worsted manufacturers 600,000 pounds of fiber during March and 1,200,000 pounds during April for blending with wool (WPB 411).

March 9, 1942

STANDARDIZATION IN BRITAIN. Business Week, February 23: Britain put on the market last month its first "utility suits" for women. They are a war product, intended to standardize quality for the consumer and to create economies for the manufacturer. But the British government advertised "style has not been standardized," and the government has no intention of forcing the public gradually to adopt what would virtually be a civilian uniform. This is typical of most of Britain's wartime efforts at product standardization.

London's first move to standardize products in the food field came in October, 1939 when the Ministry of Food took full control of the margarine and cooking-fat industry, and ordered that, for the duration, all margarine and cooking fat be manufactured to one standard and sold in a plain wrapper. Results were encouraging, as far as the government was concerned. But the scheme was a failure: (1) because the supply crisis did not become as serious as had been expected, and (2) because officials set the price of the single quality margarine too high for the mass market. Within six weeks, the "national margarine" plan was dropped.

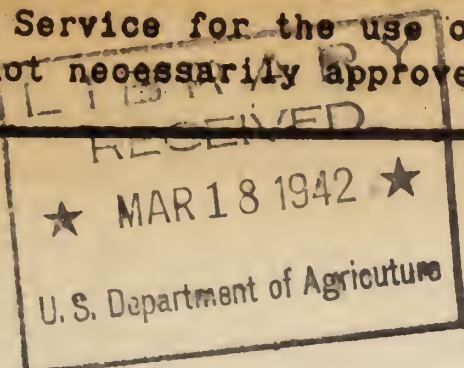
A pooling plan for tea was never enforced because of the public's determined demand for special blends. The Milk Powder Pool Ltd. was formed in November, 1941 to act as the Ministry of Food's agent for the distribution of milk powder which was more or less standardized at the same time. In February, 1941, a standard wheat-meal loaf of bread prepared from flour of 85% extraction (compared with 75% for the ordinary white loaf) was put on the market. But it was unpopular with bakers and the "standard loaf" accounted for less than 30% of the bread sales in London.

One potentially significant development in the food field came along late last year when London's Food Ministry set up rigid standards--both as to sizes and contents--for five types of soup for use in emergency feeding stations throughout the country and for distribution to air raid shelters. The cans are all marked with the Ministry of Food label and do not carry the name of the manufacturer. But the goods have proved so popular that individual manufacturers have asked to be allowed to produce some of each type under their own brand names for the general market. Emergency distribution by the Food Ministry is now on such a large scale that any standardized products it creates are bound to make a profound impression on the whole British market.

WORLD WHEAT SITUATION. American Miller, February: That the United Nations have already won the first round of the battle for food is indicated in "The World Wheat Situation, 1940-41" (Stanford University, Food Research Institute). But, while the very complete studies reveal the plenty of the Americas, Australia, and rich reserves in Great Britain, they do by no means suggest that the Nazis are starving or unable to procure enough food. Unfortunately, the summary of the situation shows that the Germans still have sufficient, drawing unscrupulously from current crops and stored reserves of overrun nations and weaker axis sisters. That food was clearly used by Hitler as a "political weapon" in France (and most likely in other instances, too), is also uncovered in the book.

DAILY DIGEST

Prepared by the Press Service for the use of USDA employees. Views and opinions on these items are not necessarily approved by the Department of Agriculture.



Washington, D.C., March 10, 1942

BACKGROUND INFORMATION ON FFF PROGRAM. A Background Information Series summarizing different phases of the Food for Freedom Program is being issued by the Office of Information of the USDA. The five summaries prepared so far are:

1. Information on 1942 Production Goals
2. More Fats and Oils --- A Vital Need
3. Dry Edible Beans
4. Chronology of Agriculture's Part in the War
5. Wartime Farm Production Problems. Others will be announced as they are available.

A copy of any one or all of this series is available to those who have real need for them. Please DO NOT ask for all, if you have need for only one or more. The summaries are of real value in a complete understanding of the Fff program.

PROGRAM FOR WHEAT IMPROVEMENT. American Miller, February: Speaking to the Kansas State Board of Agriculture Jan. 15, C.E. Skiver, in charge of Southwestern Indiana's Wheat Improvement program, outlined methods of approaching the problem of better quality grain. First was the development of the portable seed cleaning and treating machines of which there are now 84 operating in corn belt states. Stimulating seed sales by premiumizing lots of grain from fields that have met both field and bin inspection requirements has proven an excellent method of getting the proper varieties established in an area and retaining the purity and quality once the desirable variety or varieties have been established.

The development of "The Purdue Garlic Control Plan" where wild garlic is controlled by timing ordinary cultural operations has resulted from careful studies of the growth habit of this weed. The latest adventure in field crop improvement is the development of a "New Show Window" for wheat. We have developed a "Ten Acre Wheat Contest" where the grower enters his field in competition with those of others. These fields are judged by committees of farmers using a score card where one-third of the points are allotted to the crop history and management of his fields.

ARE NURSERY WORKERS AGRICULTURAL? Southern Florist, February 27: Every nurseryman doubtless is interested in the outcome of a test case being fought in the courts by the Stark Bros. Nurseries, Louisiana, Mo., over the issue as to whether nursery employees are agricultural workers or not. The National Labor Relations Board, after a hearing, held that outside employees were not agricultural and therefore were subject to the Wagner act.

March 10, 1942

TRANSFER PRIORITIES FOR USDA AGENCIES. Bureau of the Budget, in a statement February 26, established priority classification of several departments and agencies, to control transfers of personnel to war agencies. The order in which agencies are listed within each class does not indicate priority within the class. USDA agencies are as follows: Class 1, SMA (lend-lease activities); Class 3, Office of Secretary (general administration) FAR, AAA, CCC, BACE, OADR, For. Serv. (general administration, protection and management of national forests, fighting forest fires, emergency forest-fire control, forest-fire cooperation, forest products); Class 4, BAE, BDI, REA, For. Serv. (forest roads and trails); Class 5, Office of Secretary (personnel administration, budget and finance administration, general operations, land-use coordination), Solicitor, Information, Library, OES, Extension, BAI, BPI, For. Serv. (except as above), BEBQ, AMS, BHE, CEA, SCS, SMA (except lend-lease activities); FCIC, FSA, BRC, FCA, flood control projects.

"DRIVE-IN" RECEIPTS OF LIVESTOCK INCREASE. AMS reports approximately two-thirds of the receipts of cattle, calves, 70% of the hogs, and about a third of the sheep and lambs received at the 68 major livestock markets in 1941 were "drive-ins" (livestock received at markets other than by rail). Most of these were truck receipts. The proportion of drive-ins to total receipts has tended to increase since 1916, reflecting extension of good roads and expanding use of the motor truck. For example, driven-in hog receipts at 17 markets for which comparable data are available accounted for only about 2 percent of the total receipts in 1916 at these 17 markets. In 1941, about 75 percent of the receipts at these 17 markets were "driven-in." A similar trend is shown for other species at these markets.

FACTS ABOUT FOOD FOR FREEDOM. Extension Service Review, March: American farmers will produce in 1942 enough vegetables for one serving of good thick soup three times a day for every man, woman, and child in the U.S.....hogs enough to make a solid procession two abreast, snout to tail, around the world.....enough peanut and soybean oil to make more than 60 bars of soap as big as the RCA building.....enough 10-gallon cans of milk to build 25 pyramids the size of the great pyramid of Egypt.....eggs enough so that if you broke one every second it would take 1,600 years to break them all.

FARMERS TO FILL UNITED NATIONS' LARDERS. NEA Daily News-Magazine, February 22: The American farmer is engaged in a record-shattering effort in the battle of production to supply enough of the right foods for the United States -- and all the United Nations as well. While the democracies may have been caught napping in the production of guns, tanks and planes at the start of the war, they exceed the Axis nations in food and fiber resources overwhelmingly. United Nations sources produce nearly all the cotton, four-fifths of the corn, rice, cattle, and wool, close to three-fourths of the wheat and sugar and about two-thirds of the hogs. From the United States alone come half of the world's corn and eggs, about 40 percent of the cotton and approximately a fourth of the hogs.

March 10, 1941

FRUIT GROWING IN BRAZIL. The Fruit Industry of Brazil (Foreign Agriculture Report No. 2): Brazil is larger than the United States and, like this country, has great diversity of climate, soil, and population. It is therefore capable of producing a wide variety of both tropical and temperate zone fruits. The only ones of commercial importance are bananas, pineapples, and citrus fruits, and of these only citrus compete with fruits from the United States. Oranges are grown for export in the States of São Paulo, Rio de Janeiro, and Minas Geraes. Total exports, which in 1935 amounted to less than 3 million boxes, in 1939 reached nearly 6 million. Given a remunerative market, these States could expand the industry to many times its present size. Under war conditions, however, the problem of surpluses caused by contraction of the European market is of increasing concern.

Because of lack of purchasing power of the population as a whole, Brazil does not offer a large outlet for temperate zone fruit from the United States. Under favorable conditions it is estimated that this market could be expanded to absorb some 250,000 boxes each of apples and pears and considerably increased shipments of grapes, cherries, plums, and nectarines.

PACKAGING OF QUICK FROZEN FOODS. Editorial in Quick Frozen Foods, February: Frozen foods can help the Food for Freedom by supplying the home need. Elimination of 6, 7 and 8 oz. cans in favor of the No. 2 container, holding one pound, four ounces should bring the smaller 8 oz. bag and 10, 12 and one pound frozen food carton, into more demand. Packaging of quick frozen foods does not restrict itself to one vital material such as tin but is more versatile in this respect since it can be successfully preserved by a number of methods; cartons, bags, parchment, cellophane, wax paper, pliofilm, round containers, etc. First changeover of canners to quick freezing was apparent in the dog food industry. A company of Thiensville, Wis. has marketed a fresh frozen dog food containing meat, ground bone, skimmed milk, toasted crumbs, corn flakes, carrots and cod liver oil. It is estimated that 6,000 tons of tin plate are used annually to can dog food. The ban on such packaging will conserve so much tin plate. Dog food might well be quick frozen.

CANADA TO SIMPLIFY PRODUCTION, DISTRIBUTION. Canadian Textile Journal, February 13: Through the cooperation of industry, the Wartime Prices and Trade Board has commenced a broad program to effect economy and simplification in the production and distribution of civilian goods and services in order to fill the growing needs of the armed forces and consequent shortages in both materials and human resources. Each industry in Canada has been asked to formulate general rules for standardization of products, for reduction in the number of varieties, models and styles of goods, and of the sizes and quantities in which they are put up for sale, and for elimination of unnecessary costs in production and distribution. The general principles apply not only to manufacturing industries but also to retail and wholesale trade and servicing industries.

ADVICE AGAINST TIE-UPS OF SUGAR STOCKS. Office for Emergency Management release (No. WPB 344): The Division of Industry Operations, in order to make sugar available for householders, has asked canners not to accept delivery of their supplies more than 45 days before they begin canning of their 1942 pack.

March 10, 1942

"WAR CREDITS" FOR WISCONSIN STUDENTS. University of Wisconsin Press Bulletin: A system of "war credits" to aid University of Wisconsin students who enter the armed forces of the United States to complete academic work towards their degrees, is now in effect at the State University. The plan, is similar to that put into effect 25 years ago during World War I by the University. For three months or more of service in the nation's armed forces as privates or non-commissioned officers, Wisconsin students will be entitled to 10 elective credits, and as commissioned officers, to 15 elective credits, towards their degrees.

URGE STOCKMEN TO HELP TRUCKERS. Butchers' Advocate, February 18: Livestock farmers can help relieve transportation problems by shipping more animals at a time a little less often and by cooperating with their neighbors in making up a truckload, according to R.C. Ashby, chief in livestock marketing, Illinois College of Agriculture.

More than half of 64 livestock truckers at two terminal markets who were recently asked how long they could operate on their present tires said they would need new ones within six months. Thirty percent said they would need new tires in three months or less; 25 percent can run for three to six months; 11 percent can go for nine months, and 34 percent can get along a year. Livestock trucking is apparently recognized as an essential service and truckers are obtaining new tires in many localities.

NEED NEW TYPE WATERMELON PLANT. Lee A. Somers, University of Illinois, in Market Growers Journal, February 15: We need a vine having shorter internodes. We want the same number of leaves in a smaller area. We need a plant that will grow good sized, good quality melons in 85 to 90 days. With this length of growing period the growers in the mid-western states could plant their melons in May as they do now, and harvest in late July, August and September instead of the latter part of August, September and early October as they do now.

Here is a problem for geneticists and plant breeders, with of course, many complexities. It may take several years to solve them. We want a high degree of resistance to fusarium wilt bred into these melons, and certainly we want them to have the best flavor and texture. One hope is that this problem may be solved through the finding of a sport. If any grower finds a plant having short internodes or one that sends forth a pistillate flower at the third or fourth internode he will render a great service by calling the attention of plant breeders at his state college to that fact.

BOOKLET ON HOMOGENIZED MILK. Southern Dairy Products Journal, February: "Concise Facts About Homogenized Vitamin D Milk" is the title of a (free) booklet issued by the Wisconsin Alumni Research Foundation, Madison. Causes of vitamin D deficiency are considered, and other topics include effectiveness of vitamin D milk, weapon for attack on rickets, builds better bones, helps protect teeth, the homogenization process, milk as a food for all ages, health is the nation's strength. The information is interesting, authoritative and usable.

Daily Digest LIBRARY

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Washington, D.C., March 11, 1942

POLICY ON RELEASE OF EMPLOYEES FOR TRANSFER. Secretary Wickard's Memorandum No. 989 says: The Director of Personnel, with my approval, has already established the Department's policy with respect to releasing personnel for transfer within the Department or to other agencies of the Federal Government. Under this policy, bureaus and offices may not refuse to release personnel without the concurrence of the Director of Personnel. This applies as well to employees affected by the President's decentralization plans who desire to remain in Washington, D.C., or to transfer to departmental offices in the field. Hereafter, when a bureau or office agrees to the release of an employee for transfer to another bureau or office, and at the time of giving such release does not indicate the date when the employee will be available to report for duty in the other bureau or office, that employee will be subject to the reporting date set by the bureau or office to which transferring, if the transfer has been approved by the Director of Personnel. No bureau or office may hold an employee beyond 10 calendar days unless specific permission has been granted by the Director of Personnel.

In this connection, the Office of Personnel's service for facilitating transfers of personnel under the decentralization plans should be utilized to the fullest extent. Information regarding the procedure for using this service has been furnished each bureau and office. As rapidly as vacancies occur, the Office of Personnel will assist in making replacements so as to avoid lapses in service and prevent hardship on the part of employees. Those who secure positions in other bureaus or offices of the Department by this means will continue to use their knowledge of the Department's programs to the greatest advantage.

From the long-range standpoint, it will be best if we undergo, when necessary, a temporary inconvenience in a few bureaus or offices, if at the same time qualified employees can be shifted to other bureaus or offices in the Department, thus insuring against declining efficiency in the Department as a whole. Agriculture's part in the war effort is becoming increasingly important. We want to retain a qualified, efficient staff in the Department of Agriculture to do the tremendous job which we have ahead. When questions arise regarding the release of personnel to other bureaus or offices in the Department, bureau chiefs must keep in mind the Department's program as a whole, and do all within their power to retain somewhere in the Department the services of Agriculture employees even though the bureau or office concerned might have to find replacements through its own efforts or those of the Office of Personnel.

March 11, 1942

EGG-STORAGE EXPERIMENTS. AMS News, February 16! The Dairy and Poultry Division has completed a preliminary experiment to determine the efficiency of various methods of treating eggs prior to storage. The basis for determining quality was candling, according to official U.S. standards for individual eggs. Results indicated that eggs originally of U.S. Extra quality were best preserved by the CO₂ vacuum oil treatment. Plain oil-dipping was only slightly better than to leave the shell in its natural state. Eggs originally of U.S. Standard quality were best preserved by plain oil-dipping, the CO₂ vacuum oil-treated eggs being slightly better than the natural. The total of U.S. Extras and U.S. Standards found in lots originally of U.S. Extra quality showed oil-dipped eggs to be slightly superior to natural shell and to CO₂ vacuum-processed eggs. The loss was heaviest in eggs CO₂ vacuum oil-treated and least in oil-dipped eggs. The loss in CO₂ vacuum-processed eggs was attributed in part, at least, to contamination by unclean oil.

RATIONING IN CANADA. Ottawa report in Business Week, February 28: The first important revision of the original sugar rations was announced following protests from the baking industry that its ration was too small to allow it to continue to frost its cakes and pastries. Officials have agreed to postpone their decree that all icing must be given up, but, in doing so, have pointed out that Britain long ago gave up such trimmings, and that should the United States decide to take drastic measures along this line Canada would inevitably follow suit.

Canadians are getting set for gasoline rationing which is to begin Apr. 1. Before then, private and commercial users of gasoline must procure from the offices of the Oil Controller federal licenses to purchase gas and oil. Licenses cost \$1. The amount collected by the government is expected to pay the overhead of administering the scheme.

Ottawa this week followed the example set by Washington in banning the use of tin containers for a long list of items. Out of the 100 commodities which can no longer be packaged in cans, the biggest users of tin are coffee, cocoa, baking powder, and cosmetics.

BULLETIN ON FARM FREEZING PLANT. Ice and Refrigeration, February: Oregon State College has issued a bulletin, The Farm Freezing Plant, which contains detailed plans and specifications for building individual freezer units on the farm. The authors are W.H. Martin, professor of heat engineering, and F.E. Price, agricultural engineer. Various combinations of locker service are discussed including use of a rental locker in connection with household refrigeration, or use of two types of home freezer space without rental lockers. The most complete is a two-compartment farm freezer plant which has space for keeping foods at zero and at 35° F. This plan involves the investment of about \$600 if the carpenter work is done by the owner. The operation will require about 100 kw-hrs. of electricity per month, which would probably cost around \$2.

This plan is particularly adapted to needs of the larger family that can use large quantities of frozen farm-produced fruits, meats and vegetables, or the farm family located somewhat distant from rental locker service. Some individual farm freezer plants of this type are already in use on farms in Oregon and Washington and are giving good service when properly constructed.

March 11, 1942

VITAMINS FOR WORKERS IN INDUSTRY. A.M.A. Journal, February 21, in report on "indiscriminate" administration of vitamins to workers in industry: The Council on Foods and Nutrition and Council on Industrial Health conclude that evidence of the wisdom of the practice of industrial concerns providing employees with vitamins indiscriminately is lacking. When a study of any given industrial situation indicates the wisdom of providing vitamins to employees, the councils point out the necessity for observing scientific limitations of such action; after the employee has been restored to a good nutritive state, a good diet of natural protective foods thereafter should suffice. Nothing in this report is intended to belittle vitamins in nutrition, or the value of added vitamins in improving staple foods such as bread and flour. What is emphasized is need for avoidance of indiscriminate mass use of vitamins, a practice which supports commercial exploitation rather than scientific rational use of these important dietary factors.

The Journal also contains an editorial on the same subject, saying in part: Today industrial plants may help to disseminate accurate educational material about foods and nutrition. This would provide information to the working men; moreover, the material could be taken home to the womenfolk, who are the persons most concerned in the buying and preparation of foods. Some progressive organizations already are developing or have developed suitable educational material for such purposes. The National Dairy Council and the American Meat Institute, among other organizations, have charts and pamphlets that have been approved by the Council on Foods and Nutrition. Governmental agencies also offer many leaflets. A single thoroughly developed guide is much needed.

PRODUCERS ON CHICAGO MERCANTILE EXCHANGE. Chicago report in American Egg and Poultry Review, February: In an unprecedented step to give farmers and consumers a voice in the operation of an organized agricultural commodity market, elective governors of the Chicago Mercantile Exchange, trading center for futures in butter, eggs, cheese and potatoes, at their first regular meeting of the year, selected two non-member producer representatives to sit with them as full-fledged board members. The new governors are Hobart Creighton of Creighton Bros., egg and poultry producers, dealers and hatchery operators, Warsaw, Ind.; and Arthur L. Ronneberg, general manager of Dairy Products Marketing Association, a federally sponsored and financed organization set up in 1938, with a membership of eight regional butter marketing cooperatives, to help operate the government's butter market stabilization program. Both will hold office for the ensuing year.

CUBA LIMITS BEEF EXPORTS. Havana report in National Provisioner, February 21: Exportation of beef from Cuba was limited to 24 percent of the national consumption by a decree signed by President Fulgencio Batista recently. Exportation of live cattle is prohibited. The new decree fixes the price of cattle on the hoof at 3.8c per lb. The retail price of first-grade beef is raised 2c and second-grade 1c, while the third grade price remains unchanged.

March 11, 1942

WISCONSIN ISSUES NEW FOOD CIRCULARS. University of Wisconsin Press Bulletin: Two new circulars dealing with the production and preservation of food for home use have recently been published by the Extension Service of the Wisconsin College of Agriculture. "A Home Garden on Every Farm," by J.G. Moore and O.B. Combs of the horticultural department, gives detailed plans for planning and planting a garden. "Fast Freezing Meat and Poultry" tells of ways to prepare poultry and various cuts of meat for fast freezing and locker storage.

ARMY SURVEY OF DEHYDRATED FRUITS, VEGETABLES. Fruit Products Journal, February: The Quartermaster Corps is making a survey of commercial facilities for producing dehydrated fruits and vegetables, according to announcement by the War Department.

First step in the study was a visit of specialists to dehydration plants on the Pacific Coast. In charge was Samuel C. Prescott, special food consultant to the Secretary of War, assigned to The Quartermaster General's office. He was accompanied by E.M. Chace, well known Department of Agriculture chemist who has done considerable research on dehydrated foods in the Department's laboratory at Albany, California. Also on the tour was R.S. Hollingshead of the Washington headquarters, Department of Agriculture.

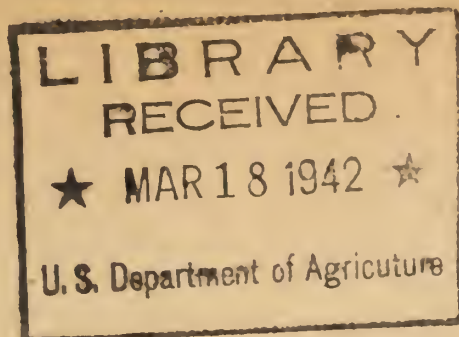
FSA FAMILIES LEARN BY DOING. Southern Agriculturist, February: One of the most important features about the program of the Farm Security Administration is the aptitude with which most of the families taking part in the program learn new and better farming and home-making methods. This has been particularly noticeable in regard to growing and processing food products for home use under the capable direction of the home management supervisor. It is all the more remarkable when we consider the fact that so many had been one-crop tenant or share-crop farmers in the past and had little opportunity to get experience in food production.

LANDMARKS IN HISTORY OF USDA. The Department has just issued Agricultural History Series No.2, Some Landmarks in the History of the Department of Agriculture, by T. Swann Harding, Office of Information. O.C. Stine, Department Committee on Agricultural History, says in a foreword the report, "has been gleaned from the official annual reports relating to agriculture, from the beginnings in the Patent Office to date. The annual reports of the Patent Office starting with 1837 and extending through 1861, the reports of the Commissioner of Agriculture beginning with 1862, and finally the reports of the Secretary of Agriculture from 1889 have been searched for data as to significant developments. These volumes constitute a valuable contemporary record of the Federal activity relative to agriculture....". (Available free from BAE Economic Information, Washington, D.C.)

CERTAIN CANNERS' STOCK FROZEN. Office for Emergency Management release (No. WPB 353): The Division of Industry Operations, in amendments to Order M-81, February 25 froze stocks of hams, coffee, and beer in canners' hands, while giving tin-can manufacturers permission to deliver until May 31, cans for such packing which have been completed.

Daily Digest

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Washington, D.C., March 12, 1942

SECRETARY WICKARD'S MEMORANDUM NO. 986 SAYS:

1. The Bureau of Animal Industry, the Bureau of Dairy Industry, the Bureau of Plant Industry, the Bureau of Agricultural Chemistry and Engineering, The Bureau of Entomology and Plant Quarantine, the Bureau of Home Economics, the Office of Experiment Stations, and the Beltsville Research Center, which now form the Agricultural Research Administration pursuant to Executive Order No. 9069, are established and continued under the same respective designations as agencies of the Agricultural Research Administration.
2. Each of the agencies of the Agricultural Research Administration shall have the same functions, personnel, positions, property, and records that constituted the agency of the same designation prior to the issuance of the Executive order, except that:
 - (a) the activities of each of the agencies shall be subject to the direction and supervision of the Administrator of the Agricultural Research Administration;
 - (b) the Administrator may transfer to his immediate office from any agency such personnel, property, and records as he may require for the proper discharge of his duties;
 - (c) the Administrator may take such action as he deems to be appropriate with respect to consolidating or integrating the work of the several divisions, sections, and units which are engaged in the performance of business, personnel, information, administrative, or other facilitating services; and
 - (d) the Administrator may take such action as he feels advisable with respect to integrating or consolidating the research of the several bureaus, divisions, sections, and units in order to promote economy and efficiency and to concentrate the Department's research efforts on problems that are most vital to the production and utilization of agricultural commodities.
3. The Administrator of the Agricultural Research Administration may delegate to other officials or employees of the Administration or of the several agencies which constitute the Administration any of the authority now or hereafter conferred upon the Administrator.

March 12, 1942

FLASH CANDLING OF EGGS. American Egg and Poultry Review, February: A rapid-production egg candling machine has been developed and is being manufactured by a company of Chicago. The new machine, if initial reported reaction of some leading operators of egg breaking and egg drying plants is any criterion, may be standard equipment in many plants. Speed in flash-candling in this machine is based on a well known time-study principle -- the fewer the operations, the greater the amount of time saved. The eggs are handled in units of 36 instead of the usual 3 or 4, and are placed directly from the case on a scientifically-designed turntable which illuminates all 36 eggs at one time. According to the manufacturers, this machine not only shows up the black rots instantly, but mixed rots, blood rots, checks, cracks, etc. are clearly visible.

After the eggs are candled all 36 are placed at one time into pans or conveyor belts for the breaking room or back into crates for cold storage. The machine can be adapted to fit into the present equipment of a plant with little or no changes. The equipment permits candling to be done in daylight, eliminating necessity for dark room, and at the same time allows the plant foreman to check the accuracy and reliability of candling operators. The machine is not a grading candler for those who see consumer eggs. It has been specially designed for egg-breaking, drying and storage plants.

JUNK DEALERS SALVAGE SCRAP. Business Week, February 28: Last week end the Institute of Scrap Iron and Steel brought to Chicago for its convention almost 600 scrap dealers, the largest attendance on record. Representatives of both the War Production Board and the Office of Price Administration praised them for good work in getting scrap into the mills. Good news for the scrap trade was official word that scrap will be re-sitiboned from automobile graveyards whenever needed. WPB speakers reported that 1941 scrap consumption was 47 million tons; estimated need for 1942 at 60 million tons. Of this, 27 million tons will be purchased scrap. The probable scrap shortage for this year is 6½ million tons, minus whatever increase in pig-iron tonnage is achieved. Government men told the convention there are about 3,000 consumers of pig iron and scrap in the U.S. There are only 62 producers of pig iron, and about 20,000 sources of scrap.

Nation-wide scrap probably averages about 50% of the content of steel. For example, in 1941, the industry used 47 million tons of scrap to produce 83 million tons of ingots. In general, the larger the proportion of scrap, the easier and cheaper the mill can make steel. This accounts in large part for the current shortage. Large tonnages of steel are being exported, hence lost to present and future U.S. scrap piles. Overseas shipments of tanks and trucks and ordnance are, from the steel industry's standpoint, serious loss of scrap. But the heavy out-bound tonnage (750,000 tons is the estimate for the first quarter of 1942) of semifinished steel goods, such as rails and bars, structural shapes and plates, is worse. Of each ton of ingots it makes and fabricates, a mill retains about 33% as home scrap in bloom, crop ends, and trimmings.

Scrap dealers are certain - and say Washington actions prove - that the volume of metal available through all of these miscellaneous sources is relatively small, and that the only big tonnage of scrap remaining is in the automobile graveyards. WPB is currently increasing pressure on graveyard owners to move the contents of the graveyards into the steel mills right now. WPB is working with the Works Projects Administration and the

March 12, 1942

Department of Agriculture to survey the country and turn in accurate figures on just how many cars graveyards contain. The industry figures a ton of metal per car. This scrap falls into several classes, of which the principal types are motor blocks, axles, wheels, and bundles.

MILK RATIONING IN BRITAIN. London correspondence in A.M.A. Journal, February 21: Though the demand for liquid milk is higher than before the war, the supply in spite of every effort is lower. The Ministry of Food is using its war power to direct supplies to those who most need them. The ration of the ordinary citizen has been reduced to 2 pints weekly, while the first claim is given to mothers, children and adolescents. On the advice of the Special Diets Advisory Committee, Medical Research Council and British Medical Association, arrangements have been made whereby physicians may prescribe quantities up to 2 pints daily, but they are asked not to prescribe the maximum in every case, because of the shortage. A priority claim up to a maximum of 2 pints daily is allowed in active tuberculosis, silicosis, diseases of the mouth, throat or gullet which interfere with swallowing, gastric and duodenal ulcer, prolonged fever and postoperative conditions after major operations. A priority claim up to 1 pint daily is allowed for active workers during an incapacitating illness, sick children not attending school, dyspepsia due to conditions other than ulcer, colitis, diabetes, thyrotoxicosis and nephritis.

DRY BEAN AND PEA STOCKS SURVEY. AMS News, February 16: Because of the importance of dry beans and peas as a food item in our war effort, the Agricultural Statistics Division is making a survey, as of March 1, 1942, of stocks of these two commodities, on farms and in commercial storage in producing States. Bean stocks, by important kinds, will be covered in 17 States and pea stocks in 7 States. This is the first March 1 survey of bean and pea stocks made by the AMS but a similar survey was made as of January 1 this year.

FSA LOWER RIO GRANDE PROJECT. BACE News Letter, February: BACE has been studying the power and machinery set-ups on Farm Security development projects. A new project at Edinburg, Texas, embraces 26,000 acres in the Lower Rio Grande Valley. About 24,000 acres are in the irrigation districts. Native desert growth of cactus, sage, and mesquite must be cleared from 4,000 acres. Twenty thousand acres will be subdivided into 60-acre farm units and used for production of cotton, truck and feed crops, and livestock.

STARCH SWEET POTATOES. L.O. Brackeen, Alabama Extension Service, in Southern Agriculturist, February: Julian C. Miller, head of horticultural research, Louisiana Experiment Station, is developing a better starch variety of sweet potatoes. He now has one variety, the L4-5, which is running around 30 percent starch and as low as 60 percent water. This compares with about 70 percent water and 23 percent starch in the Triumph, the standard variety.

March 12, 1942

"RABBIT BOX" CALF PENS. Ohio Farmer, March 7: Several farmers have attacked the problem of calf scours with an idea that has real promise. It is an individual calf pen, with a raised floor providing drainage for liquid manure. It practically licks the scours problem. Whether the good results come from the clean, dry bed entirely, or whether spread of disease organisms is minimized by individual pens, is hard to say. The New Jersey Experiment Station pioneered in off-the-floor pens, and publication of their results spread the idea. Beginning in 1936, several types of flooring were tested. Bedding saved by this method was almost 50 percent, and repaid cost of the flooring in less than a year. It is a labor saver, too, because the pens have to be bedded only every week or 10 days while the calves are small.

The first floors at New Jersey were of 3/4-inch mesh wire stretched over No. 9 woven wire fencing, on a wood frame. After testing several ideas, a floor known as "expanded sheet metal" was put on the market. This is similar to metal lath, but heavier. The floors in the pens at Ohio State University are of wood — six-inch boards spaced with cracks a half to three quarters inch wide. These are off the floor about four inches. The sides of these pens are solid. The solid walls prevent the calf nosing other calves or cattle which might carry diarrhea, and help keep the temperature even.

NEW ICEBURG STRAIN OF LETTUCE. Market Growers Journal, February 15: A new strain of Iceberg lettuce, better for mid-summer conditions than the one which has had some success in New York state, is announced by Cornell University. Seed will be produced next year by seedsmen, who will offer it to New York lettuce growers in 1943. The new lettuce known as number 456, is more resistant to tipburn than Imperial 44, and produces hard heads during periods of high temperature. California, which has had a virtual monopoly on Iceberg types of lettuce, has regions of cooler weather than does New York, which makes for better "heading". This new strain offsets the California advantage to some extent.

CONCENTRATES FOR BRITAIN. Food Industries, February: A citrus concentrate company is building a new \$1,500,000 plant in Dunedin, Fla., to meet orders for pure concentrated orange juice and grapefruit juice. Already marketing its products all over the country, the company has a \$1,000,000 initial order to produce concentrates for Great Britain under Lease-Lend. The highly concentrated juices are free from any flavoring, coloring, added sugars or preservatives. Water is removed from the juice by a special process. The juice is deaerated but not pasteurized, and it retains a high vitamin C content. Peel oil, which is subject to oxidation, is removed from the juice. Sweet and sour juices are blended to give uniformity of flavor.

FURTHER BAN ON CIVILIAN USE OF WOOL. Office for Emergency Management release (No. WPB 342): The Division of Industry Operations, by an amendment and extension of Order M-73, issued February 25, further restricted the civilian use of military quality new wool for the second quarter of 1942, while mohair was made available for civilian uses.

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U. S. Department of Agriculture

The Daily Digest

Prepared by the Press Service for the use of USDA employees. Views and opinions in these items are not necessarily approved by the Department of Agriculture.

Washington, D.C., March 13, 1942

SOUTHERN CROPS NEED WARM, DRY WEATHER. Weekly Weather and Crop Bulletin, March 11: Persistence of subnormal temperatures in the South, for the third week, and further frequent rains from the lower Mississippi Valley eastward, were unfavorable for outdoor operations. Field work was inactive and the usual spring preparation for and seeding of early crops are considerably behind an average year. Florida had further frosts extending to the southern interior and damaging tender truck; heavy rain has damaged strawberries; citrus trees are coming out of dormancy and beginning to show growth. However, continuation of low temperatures has held early fruit trees in check; the earliest varieties are blooming only in extreme South. Additional rains in the south Atlantic area were favorable for subsoil; many streams in Carolinas are reported in normal flow.

In the west Gulf area, especially Texas, soil has become dry; grains are dying locally and ranges deteriorating. In the North conditions were more favorable and considerable preliminary spring farm work was accomplished. Frost is leaving the ground as far north as southern Minnesota, but in most of the upper Mississippi Valley the soil is wet, with prospect of delay in field operations. Temperatures were favorable for a good run of maple sap in Michigan; maple sugar making has begun in Vermont. In the more Western States conditions were favorable, except low temperatures were hard on livestock in some Rocky Mountain sections and eastern Great Basin. Dry-land crops in California need rain.

Winter wheat is coming out of dormancy and beginning to show growth as far north as central Ohio Valley and to Nebraska. General condition of the crop shows little change, although damage from heaving is now more apparent in the southern Ohio Valley area. In Texas drought is becoming worse and some fall grains are dying. In Oklahoma condition of wheat is mostly good. It is very good in western Kansas, but there is loss of acreage in the eastern third, due largely to fly and heaving. In the Northwest and more western States outlook continues favorable. Spring grain seeding is still inactive, due to wet soil. Little seeding was accomplished during past week.

FARM AND HOME HOUR TALKS, WEEK MARCH 16-21. Among radio talks scheduled are the following: March 17--Know What You Sow, by O.S. Fisher, BPI; March 18--Care of the Lawn, by Morse Salisbury and Josephine Hemphill, Information; March 19--Care of Rubber in the Home, by Ruth Van Deman, BHE.

March 13, 1942

SECRETARY WICKARD'S MEMORANDUM NO. 985 SAYS: Developments since Pearl Harbor make it necessary to clarify the responsibilities of the Office of Agricultural Defense Relations, to provide more effective means for coordinating the Department's war efforts, to provide an orderly method for exercising the new duties given the Secretary by the Price Control Act, and to articulate the performance of these duties with our other agricultural defense responsibilities.

1. Effective immediately, subject to the general supervision and direction of the Secretary, the Office of Agricultural Defense Relations will have full responsibility for all liaison work of this Department with the War Production Board, the Office of Price Administration, and other Federal defense agencies, except the Office of Civilian Defense, the Office of Lend-Lease Administration on matters relating to food, the Board of Economic Warfare, and the information coordinating agencies. S.B. Bledsoe, Assistant to the Secretary, will serve as the Department's liaison representative with the Office of Civilian Defense; Roy F. Hendrickson, Administrator of Agricultural Marketing, with the Office of Lend-Lease Administration on matters relating to food; L.A. Wheeler, Director of the Office of Foreign Agricultural Relations will continue to serve as alternate to the Secretary on the Board of Economic Warfare; and Morse Salisbury, Director of Information, will continue to represent the Department as liaison with the information coordinating agencies.

2. Responsibility for supplying the Office of Agricultural Defense Relations with adequate information needed in connection with its liaison work rests with the other agencies of the Department. To facilitate the Department's defense effort, it is necessary that all agencies cooperate with the Office of Agricultural Defense Relations to the fullest extent in supplying information and in preparing recommendations and letters.

3. In addition to his position of Economic Advisor to the Secretary, Dr. Mordecai Ezekiel shall serve as a Economic Consultant to the Office of Agricultural Defense Relations.

4. To insure the Department's maximum contribution to the war effort, to facilitate the work of the Office of Agricultural Defense Relations, and to keep administrators fully informed, each of the eight Department administrators and the Chief of the Bureau of Agricultural Economics is directed to designate at once a responsible officer to coordinate defense work within his administration. In my judgment, the importance of this task justifies the use of an assistant administrator who will give this work first call on his time. The Office of Agricultural Defense Relations will arrange with these representatives for obtaining the information and assistance it needs from their respective agencies. In order to tie closely together our defense work in Washington and in the field, it is believed desirable to designate the same men to serve on the U.S.D.A. War Board Advisory Committee.

5. These defense representatives of the administrators, plus the Economic Advisor to the Secretary, the Director of Information, the Director of Extension, the Director of Foreign Agricultural Relations, the Secretary to the U.S.D.A. War Board, the Department's liaison representative with the Office of Civilian Defense, and such other staff officers as the Secretary may designate, shall meet regularly as a group with the Director of the Office of Agricultural Defense Relations for purposes of keeping mutually informed on the Government-wide aspects of Agriculture's war effort and problems, and thus be better prepared to carry through plans and programs in their respective agencies.

March 13, 1942

6. I am appointing a Price Committee, composed of J. Joe Reed of the Office of Agricultural Defense Relations, Chairman, O.V. Wells of the Bureau of Agricultural Economics, and Robert H. Shields, Assistant to the Secretary. This Committee shall make recommendations to the Secretary for proposed actions under the Price Control Act. The Price Committee will request the assistant administrators in charge of war work in the agencies to arrange for the assignment of personnel to work on particular price problems as they arise. It is expected that such assignments will be given to those members of the Department's personnel most familiar with price and other data relating to the respective commodities concerning which a determination is contemplated. The recommendations of the Secretary's Price Committee will usually be presented to the Secretary at a meeting of the U.S.D.A. War Board. When it is deemed desirable, proposals will be discussed with the group referred to in paragraph 5 of this memorandum prior to presentation to the Secretary.

7. The publication, War Letter for Agriculture, will be used to keep the Department in Washington and in the field currently informed of defense developments affecting agriculture. This will be supplemented with whatever special communications or publications may be necessary.

BULB EXPORT TRADE. Florists Exchange, February 28: The possibilities of future export trade in bulbs are indicated by the fact that a New York City company is making a large shipment of tuberous begonia and gloxinia tubers to the Transvaal region of South Africa. If the bulbs get through in good condition, this order may prove the forerunner of many such orders from abroad. L.A. Roth, manager of the bulb department of a Philadelphia Company, after a visit to the USDA station at Beltsville to inspect the experiments being carried on in relation to a domestic supply of lily bulbs, is convinced that Dr. S. Emsweller and his staff are doing a most commendable job. Among the many types of lilies being tested, the Craft and the Creole appear to indicate that large quantities of lily bulbs will be produced in the near future to replace those formerly received from Japan. Dr. Emsweller is convinced that the production will eventually be sufficient to make the price within reach of the average florist.

ECUADOR MAY SUPPLY HAND-MADE RUGS. New York Journal of Commerce, March 6: Since spread of war to the Orient and Near East, the rug-weaving industry of Ecuador may expand, says the Department of Commerce. There is considerable demand in the United States for hand-woven rugs to replace those formerly imported from Asia. The future of this industry depends chiefly on ability of the United States to supply the necessary raw materials. Approximately 75 percent of such imports in Ecuador in 1941 were received from the United States, compared with only 60 percent in 1940. The only other countries now supplying appreciable quantities to Ecuador are England, Argentina, Brazil, and Chile.

COLD CLIMATE MITTENS. Hide and Leather and Shoes, February 28: A new type of mitten has been designed by the Quartermaster Corps for the use of American nurses in cold climates. The new type mitten is designed after those worn by the Air Corps officers. The mitten, designed by the Quartermaster Corps clothing specialists in collaboration with Dr. Paul Siple, technical adviser to the corps, is of dark brown lightweight grain goat-skin with a smooth finished surface. Baby lambskin lining is used. It is a bell shaped gauntlet with a flared top.

March 13, 1942.

CANADA FACES RAW WOOL SHORTAGE. Canadian Textile Journal, February 27: Conservation of raw wool supplies and stocks of woollen and worsted cloths in Canada has become urgently necessary in view of the critical situation in the Pacific. Wool Administration officials and industry executives have warned the trade that regular shipments of wools from primary markets to Canada cannot be expected. Steps must be taken immediately to prevent acute shortage of civilian wool goods in 1943 and 1944.

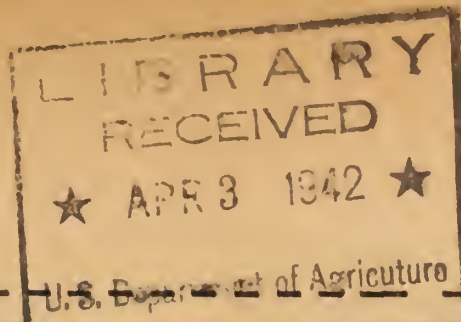
In the present critical situation, Canada can rely only on her domestic wool clip of around 20 million pounds annually, comprising shorn and pulled wool. It is possible this year's clip may be requisitioned by the government and distributed for military and civilian trade demands. This quantity represents only 25 percent of current mill consumption. If imports of cloth from Britain decline substantially this year, the domestic wool supply will be less than 20 percent of total demands. For 75 to 80 percent of her wool supplies in 1943 and 1944 Canada must rely on imports subject to enemy attack over a wide shipping area.

MIDDAY COTTON DUSTING CONTROLS WEEVILS. Farmers who dust cotton with calcium arsenate any time during the day will get as many boll weevils and as good cotton yields as farmers who apply this insecticide early in the morning. Recently completed tests conducted over a 6-year period by USDA entomologists show that midday dust applications on dry plants are effective in controlling boll weevils and increasing cotton yields. In these tests (in Louisiana), calcium arsenate applied early in the morning gave an average increase in cotton yields of 309 pounds per acre over cotton not dusted. Midday applications, contrary to popular belief, proved equally effective, giving an average increase in yields of 311 pounds. Late afternoon applications proved less effective, however, with 264 pounds more cotton per acre than from cotton not dusted. The entomologists also found that 4-day intervals between dustings gave bigger cotton yields than did 6- or 8-day intervals.

COMMERCE DEPT. TO SURVEY CONTAINERS. National Provisioner, February 28: A container survey undertaken by the Department of Commerce, at the request of the War Production Board, will cover metal, glass, plastic and paper containers, closures (caps, etc.), shipping cartons, wooden barrels, steel drums, wooden boxes, collapsible tubes and other containers in common use. Inquiries will be sent to some 3,000 container manufacturers in order to obtain necessary information on packaging uses, raw materials, productive capacity and other important factors, as well as on products for which different types of containers are used and other pertinent facts. Information obtained in the survey will be used as the basis for deciding container policies.

FARM-STRUCTURE MATERIALS. War Letter for Agriculture, March 6: There is no priority on lumber, cement, stone, rock, tile, or glass. All building should be held to emergency needs justified by a contribution to the war effort. Scarce materials for building should be applied for on a PD-1A form, if the materials are few and the suppliers limited to three or less. For a larger number of materials and a number of suppliers, the Project Preference Rating form, P-200, should be used.

The Daily Digest



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Washington, D.C., March 16, 1942

ICC WOULD LIMIT FREIGHT RATE INCREASES. Business Week, March 7: Railroads were disappointed by announcement this week that the Interstate Commerce Commission would limit freight-rate increases to percentages ranging up to a top of 6% over present schedules and that the Office of Price Administration would fight to retract or modify even these boosts. Under the new schedules, applicable both to railroads and to water carriers, a 3% upping of the freight rates on agricultural products, livestock, and products of mines will be permitted, effective as soon as the carriers are able to prepare and publish new schedules -- probably in about three weeks. The jump in rate for most other commodities is 6%. No increase was approved on iron ore.

U.C. DEVELOPS SOIL PASTEURIZING DEVICE. University of California Clip Sheet, March 11: Development of a device which pasteurizes soil, effectively killing disease-producing organisms has been announced by the California College of Agriculture. The soil is forced through a pipe heated by two 2,500-watt heating elements wound around it in a spiral. A screw conveyor forces the soil through and discharges it at the average rate of five cubic feet per hour.

Best results are obtained when the soil is damp but not so wet that it sticks. Organisms in the soil are killed efficiently when the damp soil is heated to 175 degrees or higher. Cost of materials was approximately \$100, and cost of labor is estimated at not more than \$100. Operating cost, will vary according to local electric rates, but in most cases should be less than 2 cents per cubic foot of soil.

NEBRASKA CERTIFIES SOYBEANS, SUDAN GRASS. Nebraska Extension Service News, February: Soybeans will be added to the list of crops eligible for certification in Nebraska in 1942. The two varieties are Dunfield and Illini. Certified seed from other states will be acceptable in the Nebraska program.....Nebraska produced three-quarters of a million pounds of certified sudan grass seed for planting in 1942, the biggest crop of Nebraska certified seed in history.

March 16, 1942

RADIO PROGRAM ON CROP REPORTING. AMS News, March 2: Crop reports will be dramatized over the CBS coast-to-coast network at 3:00 p.m., E.W.T., Saturday, March 21. Presented by a professional cast, this broadcast will trace the preparation of a Crop report from the time schedules are sent to the farmers in all sections of the country until the report is received by the public. Timed to nearly coincide with release of the Intentions to Plant Report, ^{why} the broadcast will call attention to this report and will point out/ ^{why} secrecy is necessary in connection with this and other crop reports. The program will also pay tribute to voluntary crop reporters for their cooperation.

DOLLAR EXCHANGE OF U.S. AND CANADA. Ottawa report in Business Week, March 7, comments on question of restoring the Canadian dollar from its present 89¢ value to full parity with the United States. Chief argument against parity is that it would upset the basis of Canada's big export business with Britain. Much of this -- bacon, cheese, wheat, metals, and other commodities -- is subject to Canada-U.K. price agreements. Unless parity between Canada and the U.S. were affected by a triangular arrangement including Britain it would have the effect of lowering the pound sterling in relation to the Canadian dollar, and Canada's returns from exports to Britain would drop. Agricultural products exported under British contract are subject to guaranteed prices to farmers and unless Ottawa asked Britain to pay more -- which it would hesitate to do -- Ottawa would have to stand the loss because political pressure would prevent lowering of prices to farmers.

SECRETARY WICKARD'S MEMORANDUM NO. 988, SUP. 1: The Consumers' Counsel Division, (formerly with the Agricultural Adjustment Administration) together with its functions, personnel, property, and records, is made a part of the Agricultural Marketing Administration.

MISS. FARM MACHINE PROGRAM. Mississippi VE-ND (vocational education--national defense) News, February 28: In the past 18 months over 43,000 Mississippians have enrolled in the classes under Mississippi's Vocational Education for National Defense program. Enrollment as of December 30 was 7,569 trainees. Of this 3,846 out-of-school youths were receiving training in 312 rural school shops throughout the state and in NYA centers. The out-of-school group are receiving training in four subjects, rough woodwork, elementary electricity, truck and tractor maintenance and hot and cold metals or blacksmithing. This program is intended to keep the farm group self efficient in order to preserve farm equipment and contribute to National Defense through greater agricultural production. At the same time, this phase of the program can serve as a "feeder" program from which trainees may later enter more intensive defense training courses.

ARTICLES ON FIF, PLYWOOD USES. Scientific American for March contains the following articles: Food for Britain Helps Us, An Apparent Paradox in Modern Nutrition; and Rolling Off a Log, which says development of synthetic adhesives has created many new applications for plywood.

EMPLOYMENT OF WOMEN IN FEDERAL GOVERNMENT. Women's Bureau Bulletin No. 182; covering period 1923-39:

Figures on total Government employment in the 16-year period indicate that the proportion of women among all employees advanced from 14.9 percent in 1923 to 18.8 percent in 1939. This increase is due to the larger number employed outside the District of Columbia rather than to an influx of women into jobs at headquarters, the latter showing a slight decline in proportion.

In 1939 women were employed in all Government agencies with one exception (an agency since abolished) and about 70 percent of them worked outside of the District of Columbia. The Post Office, Treasury, and Agriculture Departments employed the largest numbers, and taken together accounted for 44 percent of all women in the Federal service. Within the District, almost a fourth of those employed were in the Treasury Department, and next came Agriculture, Interior, and the Veterans' Administration, together employing about 27 percent. In other places not far from a fourth were in the Postal Service, and large numbers were in Agriculture, W.P.A., Treasury, War, Veterans' Administration, Interior Department, Home Owners' Loan Corporation, Social Security Board, and the Navy, chiefly in naval hospitals.

Women Government workers are concentrated in clerical occupations to a great extent. The Civil Service Commission tabulation of women employed in 1938 shows that 56 percent were clerical workers.

In no year have women comprised more than 20 percent of all the persons in Government employment or of new appointees to the classified service. The year 1938 marked the high point in women's status compared to men's both among total employees and among new entrants.

The number of new appointments of each sex to work in the four main service groups of the classified service has been studied for 1930, for 1931, and for 1937, 1938, and 1939. In the year last named, the peak for numbers of women appointees in the classified service, 73 percent were placed in clerical positions, almost 14 percent in sub-professional jobs, 12 percent in custodial work, and 1½ percent in the professional and scientific service.

Women in the Government service are an older group than those in general employment throughout the country. While in 1930 almost one-third of all women at work throughout the country were 18 but under 25, only about 12 percent of women Government workers in 1938 were so young. Highly selective entrance requirements and examinations requiring specialized experience, and, to an even greater extent, security of jobs under civil service, tend to make the Government group an older one.

A chart in the bulletin shows that percentages of total employees who were women in the 10 executive departments and 10 major independent establishments on June 30, 1939, ranged from about 5 to 50 percent. The percentage in the Department of Agriculture was 20 percent.

IOWA PLANS GARDEN "ARMY" OF 285,000 YOUTH. Iowa State College Information Service: Through the Iowa 4-H club organization it is planned to band together girls between 12 and 21 years and boys from 10 to 21 years in a drive to contribute to Food for Freedom, and at the same time provide information on gardening. Membership will not be limited to farm boys and girls, but will include boys and girls of club age in small towns who have garden space available.

March 16, 1942

WASTE LAND GRAZING FOR BEEF, DAIRY CATTLE. Oklahoma A. & M. College Agricultural News Service: In producing Food for Freedom attention is directed to the Red Plains Conservation Experiment Station, Guthrie, Oklahoma, a cooperative project of the Oklahoma Experiment Station and the Soil Conservation Service. The average annual results for a 12-year period show that continuous cotton lost 303 times more soil and 13.4 times more water in run-off than Bermuda grass on similar soil and land slope conditions.

Results of simple revegetation experiments at this station show that land, formerly abandoned from cultivation, produced 39 pounds of beef per acre while being grazed during the growing season, the third year after revegetation with sweet clover and native grass. On an adjacent pasture of 110 acres of similar land, the amount of beef produced per acre, during summer grazing by yearling steers, was 25 pounds from 14 animals in 1939, 50 pounds from 20 head in 1940 and 35 pounds from 17 steers in 1941. In addition, there was 35 to 50 percent of the vegetation left to protect the land from erosion. The annual production of 25 to 50 pounds of beef per acre on this formerly useless land compares favorably to that produced on most of the native range land of the area.

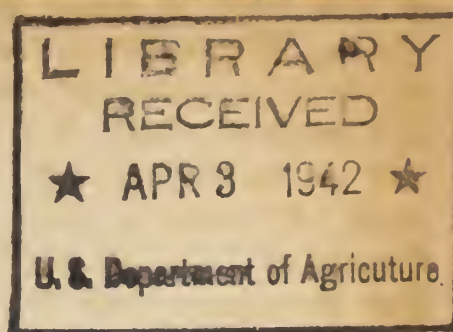
OIL PROTECTS STORED SHELLIED CORN. Farmers who fumigate shelled corn stored in metal bins can protect the grain from reinfestation by spraying the top surface with a light application of oil. U.S.D.A. entomologists and the Illinois Experiment Station, cooperating in development of this method, recommend that oil be used at the rate of 2 quarts for 1,000 bushels of stored corn. The oil should be either technical white or other refined oil having a viscosity of S.A.E. 10 or less, and be free from objectionable odors. One good way to apply the oil is at time of fumigation in the last 2 gallons of fumigant, so it forms a protective coating over a shallow surface layer of the grain. Oil does not control insects infesting stored grain, but merely protects against reinfestation.

SEEK TO PROLONG LIFE OF RUBBER. Science Service release, February 25: Newest effort to keep rubber from getting old is represented in a process just patented by Joseph R. Ingram of the Nitro, W.Va., plant of a chemical company, in which a coal tar derivative, indene, plays the principal part. Aging in rubber consists primarily in its combining with oxygen of the air. This makes it stiff, deprives it of elasticity, finally produces breakdown. To ward off this oxidation, compounds known as antioxidants are added in processing the rubber. Indene, in the form of compounds with formaldehyde and related chemicals, is claimed to be superior in this respect.

BAKING LABELS AND WRAPPERS. Business Week, March 7: An inkling of what's ahead as regards wrappers and labels has come from the War Production Board. John T. McCarthy, in charge of the Bakery Section of the Food Supply Branch, has told the baking industry (1) not to change designs of current wrappers or packages prematurely and (2) to undertake a conservation program when the present batch of plates wears out. Reason for not jumping into immediate changes is that the changeover would require the use of scarce materials while usable plates are still on hand. But when these wear out, new wrappers should be designed to cover only 25% to 33 1/3% of the product's surface, and go easy on such colors as yellow, orange, white, blue.

DAILY DIGEST

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Washington, D.C., March 17, 1942

SPICE RESTRICTION PREDICTED. Northwestern Miller, February 25: With shutoff of supplies from the Far East due to the shipping situation, spice grinders and manufacturers look for either a self, or governmentally imposed, limitation on distribution. At present importers are supplying only established trade and trying to keep supplies out of the hands of speculators. While the spices primarily concerned are mace, nutmeg, ginger and cinnamon, a probable government survey will include also stocks of cloves, paprika, black pepper, white pepper, pimento (allspice), tonka beans and vanilla beans. Two to six months' supply is available on most of them, although in comparatively better availability are Zanzibar cloves, and mustard seed. There is said to be about a two years' supply of black pepper.

DRIED EGG PRODUCTION. Nathan Koenig, SMA, in Southern Agriculturist, February: Present dried egg capacity is believed to be more than ample for domestic needs, for lend-lease shipment to Great Britain, and for stockpile supplies for future use. In fact, U.S.D.A. officials say that facilities converted for drying eggs should be returned to manufacturing skimmilk. Otherwise, possible surplus of dried egg products may have a serious repercussion on the poultry industry. Too, there is great need for increasing the production of dry skimmilk.

Peace-time production of dried eggs in the United States may be at a higher level in the future than in the past. There is a strong possibility that the use of dried eggs in the home may become more popular. Experimental work is being done by governmental and private agencies to lower production costs and develop home uses, and at least one large food concern has tried selling them in consumer packages. Until the domestic market for dried eggs is broadened, however, bakers and other food manufacturers will still be the chief buyers.

BACE NEWS LETTER DISCONTINUED FOR "DURATION." The February issue of BACE News Letter says that on account of shortage of paper and other supplies it has been decided to discontinue this bureau publication until after the war. This is the last issue for the present.

March 17, 1942

JAPANESE IN U.S. FARMING INDUSTRIES. Business Week, March 7: At the Tolman Committee's Seattle hearings last week on the alien situation, Floyd Oles, manager of the Washington Produce Shippers Assn., a vegetable growers' cooperative in which many Japanese are financially interested, told the committee that Japanese farmers "properly supervised are no detriment to public security." A state-wide survey of the California farm situation, made last week by Pacific Rural Press, revealed that the Japanese did not control more than 10% to 15% of the produce business. The Japanese were no factor at all in production of citrus and deciduous fruits, grain and hay crops, or the dairy and livestock industries, with the possible exception of the poultry business, which included a few Japanese as commercial producers. By and large, the Japanese in California are gardeners rather than commercial farmers, operating relatively small acreages, using family labor, and supplying quick, cash crops, principally to Los Angeles and Oakland markets.

SUGAR RATIONING CALLED BENEFICIAL. Science Service release February 26: Most Americans have too sweet a tooth, and a little sugar rationing will do them more good than harm, according to dentists and diet authorities. M. L. Wilson, assistant director of nutrition, of the health and welfare defense program, and Extension Director, declares: "Sugar rationing certainly will harm no one. People will meet the restriction on sugar by adding calories from other sources -- sources which contain vitamins and minerals lacking in our refined sugar." L. H. Newburgh, University of Michigan authority on diet, advises: "Sugar rationing will be good for you. If there were no sugar at all, we would be forced to eat more grains, meats, milk, green vegetables and other foods which give us everything that sugar does plus much-needed B vitamins and minerals." Russell Bunting and associates of the University of Michigan School of Dentistry state in a recent report that sugar is an important cause in tooth decay.

BRITISH BOMB VICTIMS. London cable to British Press Service (New York): After a check-up by authorities here, it was officially announced that nearly 1,000 persons of the total of 54,123 who were seriously wounded during the heavy German air raids in Britain in 1940-41 are still in the hospital. From September 3, 1939, to December 31, 1941, high explosive and incendiary bombs killed 43,235 civilians----men, women and children----in England, Wales, Scotland and Northern Ireland. The figure of 54,123 for seriously injured does not include the many thousands of persons whose minor injuries were treated at emergency first aid stations or in other ways.

FARM ACCIDENTS ARE AID TO AXIS. The National Safety Council rates agriculture the most hazardous industry in the United States with 4,200 accidental deaths during the last year on record. To help farmers reduce accidents on their farms, the U.S.D.A. has released a free publication, Watch Your Step (MF 481). Tractors and farm machinery are at the head of the farm-accident list. Many farmers tilling steep hillsides or working rough, rutted land are crushed by overturned tractors. Others are burned watering overheated radiators or refueling hot motors. Still others are crushed beneath tractor wheels. Many other farm machines and implements are equally dangerous, especially those in poor repair. Accidents in the farm home are nearly as numerous as those in the barn or field, especially where there are old folks or young children. A well-equipped

March 17, 1942

home medicine cabinet and knowledge of Red Cross first aid may make the difference between a happy ending or a fatal finish when a farm accident occurs!

BEEKEEPERS CAN APPLY FOR MORE SUGAR FOR BEES. University of California Clip Sheet, March 14: Provision has been made for appeals to the War Production Board's Sugar Section by beekeepers who need larger supplies of sugar to keep their bee colonies in production. Bee producers and apiarists are restricted in the use of sugar by Order M-55. A.E Bowman, Chief of the Sugar Section, has provided that they can file an appeal if the amount of sugar allotted is insufficient. The appeal must include a statement of the amount of sugar already provided under the quota, number of bee colonies in production, and need in terms of 100-pound bags of sugar, number of days within which the sugar must be delivered, and name of the supplier from whom any purchase is made.

GLAZED CHINTZ AS DRESS MATERIAL. Oklahoma A. & M. College Agricultural News Service: Glazed chintz is No. 1 tune on the Cotton Fashion Hit Parade this spring. All cottons are in high favor right now because of shortages of other materials but chintz is topping them all for styles ranging from playsuits to dance frocks, according to Miss Blanche Cade, of the household arts staff at college.

Also ranking high in favor are ginghams, seersuckers, prints, and various novelty weaves made of cotton. Plaids and bright colors are biggest news for all of these. They are being used for sun-up to sun-down and for all ages. Reason for cotton proving so popular this spring, besides material shortages in other fibers, is its ease of care.

WICKARD ON POULTRY ROLE IN WARTIME. Poultry Tribune, February: (Annual Baby Chick Number): Secretary of Agriculture Wickard, in an exclusive message in this issue, reviews the poultry industry's role up to this time-- and suggests that even greater production challenges may be forthcoming. He emphasizes those legal measures which have been taken in Washington to support prices--points out that every effort will be made to maintain profitable prices. Particularly significant for those who may not believe that concern about the post-war situation can be postponed until nearer the day of victory is the following statement of Secretary Wickard which concludes his article:

"The Department of Agriculture is convinced that it is not necessary for this nation ever again to endure a major economic depression. If enough of the people of the United States hold to this belief, the necessary ways and means can be found to keep people at work, to keep them supplied with the things which make for an improved standard of living, to keep agriculture busily engaged in producing food and fiber for which there is a ready market at fair prices.....We can have continuous prosperity in peacetime, if enough people want it and believe in it."

OKLAHOMA FARM BUREAU FORMED. Nation's Agriculture, March: John I. Taylor of Mt. View, Comanche County, was elected president of the Oklahoma Farm Bureau at its first meeting in February. Officers of the new state Farm Bureau will center their efforts this year on building up membership. In November, the first annual convention of the organization will be held in Oklahoma City. Farmer control of the organization was insured by adoption of a by-law which restricts full membership to those who receive at least 60 percent of their income from the sale of farm products.

March 17, 1942

HOSIERY SITUATION IN CANADA. Canadian Textile Journal, February 27: After a year of intensive reorganization in the use of new types of yarns arising from restrictions and latterly total prohibition of the use of raw silk, the full-fashioned hosiery industry is approaching the point where it will be able to maintain production on standardized types of merchandise in quantities sufficient for domestic requirements. Colours have been restricted and may not be changed more than three times a year. Standard types of full fashioned hosiery are divided into five broad classifications comprising rayon, crepe, cotton, specialty or novelty, and nylon lines.

CANADA SHORT OF BACON. Montreal report in National Provisioner, February 28: Despite wartime curtailment of domestic consumption of bacon, which is likely to continue until next fall, the present rate of hog production in Canada is likely to find the Dominion failing 85,000,000 lbs. short of bacon for export to the United Kingdom, L.W. Pearsall, chairman of the Dominion Bacon Board, told the Ontario Swine Breeders' association recently. Canada's present objective is the delivery of 600,000,000 lbs. of bacon to Britain by next October. Canadians last year probably did without 75,000,000 lbs. of bacon to aid Britain. The Pacific war may result in enormous food demands being made upon Canada, if the Japanese endanger the large supplies of cheese, mutton and lamb from Australia for Britain. Canada may be asked to substitute fresh pork to replace these foods.

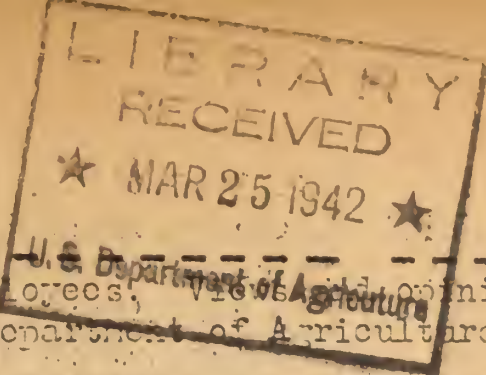
ILL. FARM CHEMURGIC COMMITTEE REPORT. W.L. Burlison, chairman of committee, in Chemurgic Digest, (Vol. 1, No. 2): Castor beans have been under investigation by the University of Illinois for four years. For three of these years, yields of the better varieties have averaged approximately 1,000 pounds an acre at the Urbana station. Ten varieties have been under study at different locations, including seed from Texas, Missouri, Kentucky, and the U.S. Department of Agriculture.....For a number of years, we have studied perilla, particularly in the southern part of the state. This year we had test plantings at Newton and Dixon Springs. There were plantings at other points but germination failed completely. The best yield in Illinois has been 366 pounds an acre.....The Chemurgic Council has sent into Illinois a number of special crops such as coriander, caraway, fennel, safflower, anise, and sunflower. These were planted at more than 40 locations in the state in 1941.

VEGETABLE-GROWING SCHOLARSHIPS. Indiana Farmers Guide, March 1: The National Junior Vegetable Growers Association has announced appointment of Roscoe Frazer, Purdue University, as State chairman in the \$5,000 national scholarship program for Indiana farm youth. The program is planned to acquaint farm youth with efficient marketing methods. Entries between the ages of fourteen and twenty-one will be eligible to compete for a \$500 grand national award, four regional awards of \$250 each and thirty-five individual prizes of \$100 each.

IDLE MACHINES PUT TO WORK. Office for Emergency Management release (No. WFB 278); The Production Division says idle machine tools, some of which date back to the Civil War, have been put to work again as the result of surveys made by the WFB production Division.

The Daily Digest

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Washington, D.C., March 18, 1942

DR. HENDRICKS, BPI SOIL SCIENTIST, TO RECEIVE AWARD. Dr. Sterling B. Hendricks has been selected to receive the 1941 award for Scientific Achievement in the Physical Sciences, given each year by the Washington Academy of Sciences, to be presented at the Academy meeting March 19. Dr. Hendricks has been employed for the last 12 years in soils and fertilizer work, particularly research on solids by means of x-ray diffraction and application of physical and chemical methods to agricultural problems.

His most noteworthy contribution has been the study of compounds of which soil is composed and from which it forms. He has helped advance knowledge of the base exchange of clays, one of the properties that influence soil fertility. His present work centers about soil and mechanism of plant nutrition.

BONE MEAL INCREASES CHICK COCCIDIOSIS. Poultry Tribune, March: From the Wisconsin Experiment Station comes a report to the effect that feeding baby chicks on rations containing steamed bone meal tends to increase the danger from coccidiosis. Four times as many chicks died from coccidiosis among those given either 2 percent or 3 percent steamed bone meal as among those getting only the bone meal contained in 4 percent of meat scrap. All chicks were artificially infected with the disease. Of special interest was the fact that chicks receiving 5 percent of flowers of sulfur were just as hard hit as the others when they also received the bone meal. A trial with nearly mature birds showed no significant difference between the bone meal and the control groups.

ARTICLES IN SCIENCE DIGEST. Articles in the April issue include the following: On the Farm After the War (condensed from section of 1940 Yearbook of Agriculture); U.S. Ready to Feed the World (from PM's Weekly); Silver Lining to Tin Shortage (from Science Service, suggesting possibility of silver linings for cans); The Future of Synthetic Rubber (from Chicago Tribune); Facts and Fancies About Foods (from American Journal of Public Health).

March 18, 1942

CARE OF AUTOS, TYPEWRITERS, MACHINES. AMS News, February 16: It will be increasingly difficult, if not impossible, to replace automobiles, light trucks, and other equipment such as typewriters, and adding, addressing, calculating, duplicating, folding, and sealing machines. It will be necessary to use present equipment for at least 2 years longer than has been the policy in the past. This means that the utmost care must be taken in prolonging the period of usefulness of the existing equipment, and reducing maintenance costs to the minimum. Driving of Government vehicles at excessive speeds must be eliminated. The ultimate success of our war efforts depends on the utmost conservation of critical materials. This, means keeping our present equipment in the best possible condition.

NITROGEN GAS FLOWS FROM RANCH. Science Service release, February 26: Pure nitrogen gas flows from a recently drilled well in an eastern Wyoming ranch, Harold Cook, consulting geologist of Agate, Nebr., reports in Science. This is believed to be the first nitrogen gas well ever struck. The well was being drilled for water, when it began to yield gas at a considerable pressure at a depth of only 156 feet. J.G. Crawford, chemist of the U.S. Geological Survey at Casper, Wyo., found it to be 100% nitrogen. Nitrogen, which is mixed with oxygen in ordinary air, has no fuel value. However, because it combines with other elements under special conditions, it is used in making artificial atmospheres where it is desirable to exclude oxygen, and thus has considerable value in many industrial operations, such as rubber storage. At present, nitrogen is obtained by extracting it from the air, usually as a byproduct in liquid air manufacture. Since an apparently large supply of pure nitrogen, ready to use, may have value in the present war emergency, the new-found well has been shut down and closed, to conserve the gas until possible uses are developed.

NOTES IMPORTANCE OF KEY FARMERS. Illinois Agricultural Association Record, March: Ever since the first announcement of the Secretary of Agriculture calling for substantial increases in agricultural production as an essential to national welfare, spokesmen for the Illinois Agricultural Association have insisted that the chief, if not the only, limitation in meeting this request would be the inadequate supply of experienced farm labor. The growing seriousness of the situation resulted recently in a conference called by the Director of the State Selective Service System of representative leaders of agriculture in Illinois. While the responsibility and obligation of farmers to their Government has not changed in any way, yet it is frankly recognized by Selective Service officials, that the important or "key" agricultural workers can make their greatest contribution to national welfare in the field of agricultural production, at least for the crop season '42. A special agricultural questionnaire will soon be made available to all agricultural registrants.

"LIQUID APPLE". Food Industries, February: Various brands of apple juice have been on the market for several years but a food company of San Francisco, Calif., is introducing "liquid apple," a creamy white apple juice containing a large proportion of the apple pulp in finely comminuted form.—The juice is produced by a two-stage extractor—a unit capable of handling 2 1/2 tons of apples per hour, fed into the machine complete with skins and cores. By continuous process the juice is deareated, flash pasteurized, filled into cans, sealed, sterilized and chilled, the whole operation taking but a few minutes.

March 18, 1942

FRUIT, VEGETABLE PACKERS CHANGE TO GLASS. Business Week, March 7: With California packers leaning more and more to glass packaging many unforeseen merchandising problems are coming to light. Despite the fact that canners will get 100% of their 1941 tin can supply for the 1942 fruit and vegetable pack, several packers prefer trying their luck in glass. Among the arguments formerly advanced against glass packaging are breakage and extra cost of packing and handling. Contrary to public conception, breakage in wholesale deliveries is negligible (for instance, Crow-Roberts, northern California distributors for U.S. Products Co., San Jose, California, pioneers in glass-packed fruits and vegetables, report not a single jar broken in their territory since they started handling the glassed products). Far more serious to the retail grocery is the difficulty of stacking and displaying glass jars which, unlike canned goods, cannot be stacked high on shelves or pyramided in island displays. In favor of glass packaging is a growing consumer demand, created largely by government promotion of home canning (rubber rings and sugar for home canning will be available). Many customers now purchasing glass-packaged fruits and vegetables have in mind the reuse of the containers.

One of the worries of the canners, if glass canning becomes general, is the question of what to do with B and C grade products. The eye appeal of Grade A fruits is a potent selling factor but with lower grades, or with products which do not hold their color and shape well, they fear that easy inspection by the housewife may be a distinct handicap. Already canners have abandoned the glass packing of artichoke hearts because they don't show up to advantage in glass. Some canners are considering use of opaque glass in the packing of goods below fancy grades.

ARMY, NAVY TO USE ENRICHED FLOUR. American Miller, March: The U.S. Quartermaster General recently authorized for the first time use of soft wheat flour for cakes, pastries, etc. The army's most important news of the month for millers was that army flour purchases, beginning in March, will be enriched flour purchases. The Navy is following suit. The scale on which the Army operates as a user of flour was indicated last month when Army officers took over the American Institute of Baking school in Chicago to train 624 enlisted men per year as Army baking instructors.

From South Carolina in February came the first of several state legislature bills drafted to make flour and bread enrichment compulsory.

ASBESTOS GRANARY. Capper's Farmer, March: A farmer in Boone County, Iowa, has covered his granary with asbestos sheets, louvres, siding and shingles. The building is fire-resistant, weather- and rat-proof. All outside cribbing is of asbestos louvres three-eighths inch thick, 9 inches wide and 8 feet long. They are corrugated the long way with flared lower edges to afford upward and inward ventilation, and to exclude moisture from beating rains. Corner trim is of the same material. Gables are of asbestos clapboards over shiplap boxing and waterproof felt paper and the Gothic roof consists of shiplap and felt overlaid with asbestos shingles. Even wood trim of roof extensions is covered with asbestos. The 2 exposed sides of a corner feed room or small-grain bin are protected by flat sheets. Sliding doors at each end of the drive are built up of tongue-and-grooved material overlaid by one-eighth inch asbestos board.

March 18, 1942

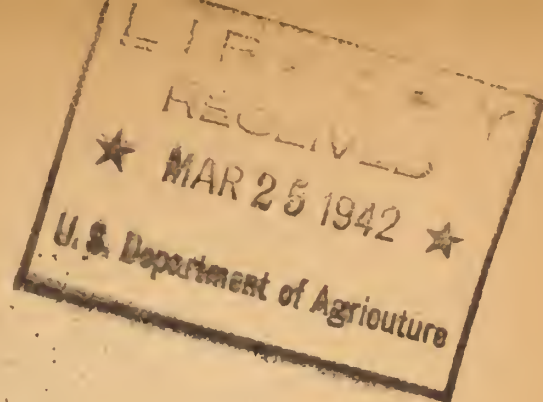
REGULATION OF FUTURES TRADING. Nation's Agriculture, March: There is a much better understanding among farmers today that the job of Federal regulation of futures trading is not to make prices high or low. The task rather is to maintain constant surveillance of the markets; to set up limits and red lanterns; and to see that traders, large or small, do not step over the line. In keeping with this practical objective, real accomplishments have been made. Since 1936 there have been few large scale attempts to manipulate or corner commodity prices. Speculative raids on the market which were so common before the World War now invite fine and imprisonment. Futures commission merchants are required to register with the Federal Government each year; and their books are periodically examined. In 5 years of the Commodity Exchange Act, most of the regulatory objectives advocated by the farm organizations, and made evident by 15 years of experience under the old law, have been realized.

WESTERN FRONT IN FFF PROGRAM. Article in Soil Conservation, March: The seventeen Western States occupy a major position in the Food for Freedom battle front. They have the land, water, and climate to assure maximum yields of agricultural and livestock products of select qualities. Since our entry into the war, the demands for increased food production have emphasized to a greater extent than ever before the importance of the irrigated lands within these States.

Some redesigning of operations and practices will be necessary on many farms and ranches in order that the most economical and efficient methods may be adopted to obtain the desired results. Required increases in amounts of sugar, poultry, dairy, and garden products, however, will necessitate more intensive operations of the kinds most suitable to irrigated farming areas. In this work every ounce of productive labor is important. None should be wasted and, without doubt, successful campaigns against soil and water losses will constitute one of the most effective steps in achieving the production objectives.

LAND OWNERSHIP IN COLOMBIA. Article on eastern and central cordillera of Colombia, in Bulletin of Pan American Union, March: One of the most striking examples of the reversal of pattern in an urbo-rural cultural landscape as a result of land concentration in a few hands is to be seen in the environs of Bogota. A few families have for generations controlled almost all the land of the Savanna, with the result that all the fertile alluvial soil is in grass. Fine modern suburban residences or apartment buildings are within a stone's throw of extensively exploited pasturelands. The minutely subdivided and intensively cultivated fields of the small landholders are often on less fertile and more steeply sloping hill lands many miles from the market, and produce must be transported across the extensively exploited pasturelands to the city. In this way the influence of the manorial land tenure system still makes itself keenly felt in the economic development of a great modern city.

TANNED LEATHER FOR SHOES. Office for Emergency Management release (WPB 443): Leather and Shoe Section of Division of Industry Operations warns shoe manufacturers that the entire amount of tanned leather obtained by them through a preference rating certificate must be used for defense orders.



The Daily Digest

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Washington, D.C., March 19, 1942

AGRICULTURE GOES ABROAD. Under this title, an article in Farmer's Digest, March, says: Activities of the Office of Foreign Agricultural Relations in the field of international commodity agreements may well be considerably increased in the near future. It is well recognized that several of the world's great agricultural export commodities such as wheat and cotton are faced with the serious problem of reconciling well-maintained export supplies with a materially contracted export outlet. In the case of wheat, efforts are now being made to apportion among the exporting countries equitable shares of the existing overseas markets without losing sight of the possibility of expanding that export outlet beyond its current much reduced size.

The International Coffee Agreement represents an example of what may be accomplished in the field of international commodity agreements. Under our leadership, all of the coffee-producing countries of the Western Hemisphere were allotted shares in the coffee market of the United States, their chief customer. While the results gained with respect to coffee are in somewhat reverse position as against those being sought with respect to wheat, the agreement is an outstanding example of what can be accomplished in this field.

SUGAR PRODUCTS UNDER U.S.-CUBAN PACT. Note on 1941 supplementary trade agreement between United States and Cuba, in Bulletin of Pan American Union, March: On molasses and sugar sirups imported from Cuba (edible molasses, liquid sugar, and industrial molasses), the new agreement provides duty rates 50 per cent below those applicable to Cuba under the Tariff Act of 1930.

Of these three classifications, industrial molasses is by far the most important. It is used chiefly in the manufacture of industrial alcohol and, to a smaller extent, in livestock feed. As a result of wartime demand, consumption of industrial alcohol in the United States has risen to extremely high levels, involving larger molasses imports. Imports of this type of molasses from Cuba in 1940 amounted to approximately 239,000,000 gallons valued at \$10,000,000.

March 19, 1942

STUDY POST-WAR MARKETS FOR SYNTHETIC RUBBER. Business Week, March 7: Sixteen years after a research chemist discovered koroseal the synthetic material is back in the laboratory being readied for postwar uses. According to the B.F. Goodrich Co., these uses include stockings that can't run, draperies of colorful fabrics so waterproof that they can be cleaned with a hose, and transparent bags for canning foods which can be sealed with a hot iron. While other firms have reported a continuance of research even though their production has been diverted to the war effort, Goodrich's announcement represents the first case in which a company has revealed what some of its new products will be.

WARNIS AGAINST HOOF AND MOUTH. Coastal Cattleman, March: At a recent meeting of the Livestock Sanitary Commission of Texas, H.L. Darby, Fort Worth office, inspector in charge of the Bureau of Animal Industry, warned cattlemen of this area of the danger they are now facing of infection of their herds with foot and mouth disease, and recommended that they be on the lookout for any signs of this disease. It could be brought into this section from boats arriving from foreign countries which are heavily infested with the disease, he said.

MASS. GROUPS BOOST ENRICHED FLOUR. Northwestern Miller, February 25: Promotion of enriched white flour and bread has been selected as the defense project of the Massachusetts Home Economics Association. Three organizations cooperating with the state group in this project are the Connecticut Valley Home Economics Association, Worcester County Home Economics Association, and Eastern Massachusetts Home Economics Association. Directors of the four home-making radio programs originating daily in Boston use the word "enriched" in all recipes taking flour, as do writers of the leading food columns of the metropolitan newspapers. Other home economists plan to follow the same policy.

SHELL EGG SHIPMENTS FOR BRITAIN. U.S. Egg and Poultry Magazine, March: Despite difficulties in shipping and the time involved, good shell eggs, properly packed, can arrive in England edible and satisfactory. The great bulk arrive in relatively decent condition, despite stories that a large percent of the shell eggs we have shipped have arrived in inedible condition. Sample tests on eggs carried on five boats in November ran about 3 to 4% inedible, 2 to 3% leakers, and about 1% loss due to breakage, the eggs representing total loss running about 5 to 7%.

Roughly, total loss and leakers represented about 1½ dozen per case—or 5% of the eggs. Of course, there were a few single cases of eggs examined where loss and leakers ran as high as five dozen, but these were unusual. The loss of approximately 1½ dozen is still too much, however. Look at it this way, for every 12,000 cases (30 cars) a loss of 18 eggs per case means that 216,000 people have been cheated out of an opportunity of probably having two eggs a month instead of one, and shipping space for 600 cases (1½ cars) has been wasted.

March 19, 1942

FUMIGATION VS. CHICK EMBRYO MORTALITY. Poultry Tribune, March:

Because of reports that excessive concentration of formaldehyde for incubator fumigation resulted in high chick mortality, workers at the Kentucky Experiment Station undertook tests to determine how strong a concentration can be used without danger of serious death loss among the chicks, and the stages in embryonic development at which susceptibility to formaldehyde is greatest. Fumigation at "normal" concentration of 35 cc. of formalin and 17.5 gm. of potassium permanganate per 100 cubic feet has been repeatedly shown to be harmless to either eggs or chicks. In the Kentucky tests there was a positive relationship between concentration of the fumigant and mortality of embryos, but the losses were not great enough to be of any practical importance until the concentration was more than four times normal.

NATIONAL MARKETING PROBLEMS. Article in Nation's Agriculture, March:

Studies by W.C. Crow and others in the Bureau of Agricultural Economics indicate that it costs more to distribute fruits and vegetables within the city of New York than it does to produce those fruits and vegetables, grade and package them, and ship them to the New York City limits. The very size of our food marketing bill indicates that farmers and the whole consuming public need to be giving serious attention to marketing problems.

It is proper that groups of farmers organize to study some of the big national marketing problems and see what can be done about them. The first thing we need is an intelligent understanding of these problems and some agreement as to what policies are needed. If farmers can agree on these things, I believe they can go a long way toward eliminating inefficiencies and bringing about adjustments which will greatly improve our marketing system and make it of more service to the farmer and to the consuming public.

WAR AND SOIL CONSERVATION. Article in Soil Conservation, March:

We will send to the British in 1942: About $4\frac{1}{2}$ billion pounds of milk; one-half billion dozen eggs; 18 million pounds of poultry; $1\frac{1}{4}$ billion pounds of pork and lard; $1\frac{1}{4}$ million tons of fruit, and $2\frac{1}{2}$ million cases of canned vegetables. All of these products will feed about 10 million people and amount to from 6 to 8 percent of our own production.

War will, as 25 years ago, place a greater burden on the soil. There are two important differences though. One is that the people and the Government have become soil-erosion conscious. We have learned how to conserve the soil and at the same time maintain and even increase production. This time no new acres that should be in grass and trees will be plowed up if the Department of Agriculture can help it.

AMERICAN MILLER, March: With 3,000,000 U.S. women and children

regularly using used flour sacks and used feed bags for dresses and other household purposes, and with the factor of war economy yet to be heard from, over 50,000,000 flour and feed bags per year already are of the cotton print variety. On the basis of past experience in emergencies, there is bound to be not only an increase in re-use of family flour sacks and feed bags, but also a general rise in bagging requirements for the expanding production of flour and feed.

March 19, 1942

475,000-ACRE SOIL SAVING PROJECT. Illinois Agricultural Association Record, March: An entire Illinois county in one large soil conservation district is the goal of interested farmers in Adams county where they are moving toward the formation of what would be the largest soil conservation district in Illinois. The project now is well advanced, with petitioning going on, prior to submitting the proposal to the state conservation board at Springfield.

Adams county, with its rolling terrain, is a natural area for soil conservation work. The large number of CCC demonstration projects has created interest. Contour farming, grass waterways, dams and the like have all been employed. One process, of terracing land entirely by the use of the plow, has created unusual interest.

Since the CCC camp will be terminated by Oct. 1, the people in Adams county are especially interested in seeing that the work of soil conservation which its projects have suggested is carried on in greater volume. This formation of the soil conservation district on a county-wide 475,000-acre basis is the proposed answer.

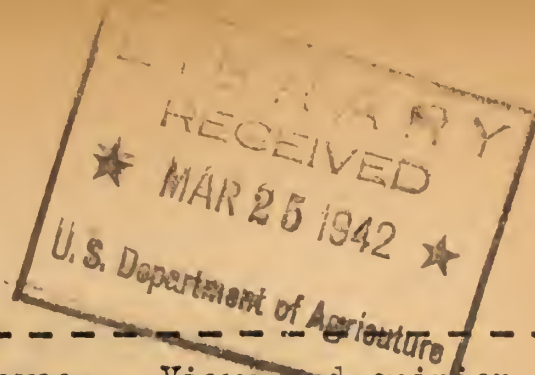
AGRICULTURE IS MOST HAZARDOUS INDUSTRY. Prairie Farmer, March 7: Record show that agriculture is the nation's most hazardous industry. There were 17,000 industrial deaths in 1940. Agriculture topped the list with 4,500. Trade and service industries had only 3,700 deaths. Construction, manufacturing, transportation and public utilities, mining and quarrying each had fewer deaths than agriculture. And the 4,500 farmers who died, died at work. Another 6,500 farm men, women and children died as the result of home accidents. The accident and death rate will be higher this year due to war factors unless farm families cooperate to guard their safety.

This year older farm machinery will be in use. Some of the machines are patched up. Men who thought they had retired will be operating this old, patched-up machinery. More women, more young people, more "green" hands will be on the job this year, helping agriculture top its war production goals. The shortage of doctors and nurses will mean that few of them can leave their central headquarters to make calls in the country. They'll have to stay put to treat the cases which come to them. All these things coming in a year when farmers must exert every ounce of energy to produce, emphasize the importance of preventing accidents.

PARTS, SUPPLIES FOR LOCKER PLANTS. Ice and Refrigeration, March: Refrigerated locker storage plants can obtain repair and maintenance parts and supplies through Preference Rating Order No. P-100, which grants an A-10 priority, according to a bulletin issued February 12, by the National Frozen Food Locker Association, Inc. This means that the plants can assign an A-10 rating to their order for needed refrigeration repair parts and supplies.

MAY DELIVER AGAVE FOR SAND BAGS. Office for Emergency Management release (WPB 445): Division of Industry Operations tells manufacturers binder twine made of agave fiber may be delivered to persons having defense orders for sand bags.

The Daily Digest



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Washington, D.C., March 20, 1942

EISENHOWER TO HEAD NEW WORK CORPS FOR ALIENS FROM COAST AREAS. UP report in Washington Post, March 19: President Roosevelt yesterday set up a "work corps" for aliens evacuated from military areas to guard against sabotage and espionage. The corps will be under the jurisdiction of a War Relocation Authority established to provide "useful work" for evacuees and to govern their working conditions and rates of pay. While there is nothing compulsory about enlistments, persons relocated who do not volunteer probably "will be on their own" and eventually will have to shift for themselves. The program will be supervised by Milton S. Eisenhower, former land use coordinator for the Agriculture Department, who was named by the President to head the new Authority. The executive order authorized Eisenhower to "accomplish" all necessary evacuation of persons from military zones which have not been cleared by Army authorities and to provide, as far as feasible, useful work for evacuees in industry, commerce, agriculture or public projects. Agriculture will be one of the major fields in which the work corps will operate. Japanese aliens removed from military zones along the Pacific Coast already have gone to work in Colorado sugar beet fields. None of the corps members will be assigned to tasks "in which there would be a possibility of sabotage."

NEW CHEESE-MAKING METHOD. Roanoke (Va.) report in Dairy Record, March 4: What may prove to be a boon to southern dairying and southern cheese making was announced recently as a new method which utilizes raw milk too high in lactic acid for standard cheese manufacturing procedure. The method was introduced by W.D. Saunders, dairy specialist of the Virginia Experiment Station. Heretofore, high acid milk, as a result of warmer climates, made the manufacture of cheese impractical on a large scale in the southern states.

March 20, 1942

NETTED SPONGE DEVELOPED. Business Week, February 28: With imports of sponges from the Mediterranean and Philippines cut off, and a blight causing serious damage to beds in our own southern waters, bidding for available supplies has hiked prices 200% to 500% over the 1940 price level. To relieve this shortage partially, a sponge pad, made from scrap and trimmings which were discarded formerly, is being manufactured by sponge importers of St. Louis. To remove the coral deposits and sand with which sponge scrap is encrusted, they have developed a cleaning process which includes acid treatments, crushing, and washing, after which the clean, soft bits of sponge are encased in cotton mesh bags in the form of pads. The cloth covering gives the sponge shape and is said to provide extra friction which facilitates cleaning.

USDA TESTS LETTUCE IN PUERTO RICO. Puerto Rico Extension News, January: Head lettuce is a luxury on the Puerto Rican table. Increased demand due to the large number of continental Americans now residing on the island, and changing eating habits of the native population (specially urban), head lettuce is being imported from California and other western states. Transportation, refrigeration, and losses in transit make the product expensive; prices are prohibitive for low income families. (20c. to 30c. a head, retail).

The USDA Experiment Station has made a long step towards developing head lettuce on the island. Trials were made with four varieties in each of two locations. Heading of all four varieties was unsatisfactory near sea level. In the Maricao area, however, 60 percent of Imperial 44 produced heads sufficiently large and compact to meet local market requirements. It seems possible that head lettuce of acceptable market quality can be produced in Puerto Rico at all seasons of the year.

SHORTAGE OF 30-DOZEN EGG CASES. Coastal Cattleman, March: Large shipments under lend-lease and rapid changes in the egg marketing situation are causing serious reduction in the supply of used 30-dozen egg cases available to poultrymen all along the eastern seaboard. The poultrymen have, for a long time, depended upon used egg cases coming into the eastern and southern markets from the Midwest and the Far West. Saving egg cases for resale to producers will be serving the cause two-fold. First, it will conserve materials that are now or soon will be scarce, such as nails, lumber, and cardboard. Second, it will assist poultry farmers in cooperating with the national plan of producing and properly preparing more eggs for consumption here and in allied countries.

DRY SKIM-MILK SUBSTITUTE. Poultry Tribune, March: Two years of research at the New Jersey Experiment Station reveals that fish meal and alfalfa leaf meal, 50 lbs. each, can substitute for every 100 lbs. of dried skim-milk in the ration of chicks up to six weeks of age. The birds will not be injured in any way by the substitution. The experiments indicate that a combination of 5 percent alfalfa leaf meal and 5 percent fish meal, together with supplemental meat scrap and soybean meal for protein, will provide the basis of satisfactory diets during the remaining period of growth and subsequent year of egg production.

March 20, 1942

SUPPLY OF DRAFT HORSES. Breeder's Gazette, March: However temporary the demand for large numbers of draft horses, there is always room for better farm drafters. America is fortunate in having splendid foundations of Percherons, Belgians, Clydesdales, Shires, and Suffolks. These compact, hard-flat-boned, clean-legged breeds have been molded admirably to our farm conditions, with action and looks to spare. Percheron blood is most prominent in American horses, having been used 125 years. For months improving business has been reported by the Percheron Horse Association of America, Union Stock Yards, Chicago. However, the turn did not come soon enough to prevent a 9% decrease in registrations during the year Nov. 1, 1940-Oct. 31, 1941. In terms of new members, the 194 admitted in the fiscal year averages 16 a month, whereas 26 were admitted this January. At the same time, work horses are reported as selling at \$25 a head more than they brought a couple months ago.

BEEF PRODUCTION ON TIMBER LAND. Southern Planter, March: For several years the North Carolina Department of Agriculture and Experiment Station have been experimenting on the use of reeds for grazing, and now these agencies, in cooperation with BPI, BAI, and For. Serv., are making further studies on the dual use of forest lands for cattle raising and timber production. Special emphasis is given to the grazing of forest lands, but year-long cattle management practices are also being studied. Experimental studies in the reed forage type carried on for several years at the Blackland Test Farm by State agencies show that native reeds are an economical source of feed for cattle. Reeds are used for grazing from about the first of May to the first of January, or eight months of the year, but represent only 9 percent of the total cost of keeping a beef cow. The calves are usually dropped in February, March and April and are also on reed pastures until weaned about November 15. At this time they usually weigh between 350 and 400 pounds. During the remainder of the year the cows are carried on corn-stalk fields and Abruzzi rye pastures and fed enough additional feeds such as corn shucks, soybean hay, corn and cottonseed meal to maintain weight.

NEW USES FOR ROSIN DERIVATIVES. Florida Grower, March: Rosin derivatives used in lacquers, paints, plastics, roofing, floor tiles, and box toes of men's and women's shoes now are manufactured at new Mississippi plants of a powder company. Many of these are new uses of rosin derivatives expected to expand the use and value of this important southern pine product. The new units adjoin the company's turpentine, pine oil, and rosin plants, increasing the company's production of rosin derivatives approximately 90 percent. Opening of the new plant is part of a program of expanded chemical research for increasing and broadening markets for naval stores products. Such stabilized markets are expected to bring greater prosperity to the whole naval stores region of the South.

"MOLD INHIBITOR" PRESERVES BREAD. Popular Science, April: Bread is protected from mold by the addition of a small quantity of "mold inhibitor," a substance that is naturally present in many other foodstuffs. This agent, when added to the bread dough before baking, checks the development of mold particles for a period of several days after the bread has been unwrapped. Approximately two ounces of the agent will protect 100 loaves. It does not affect the taste or appearance and is expected to cut down substantially the enormous loss of bread due to mold.

March 20, 1942

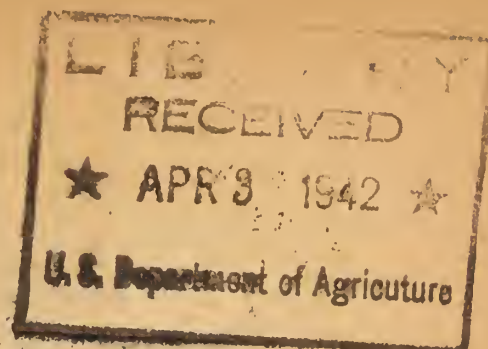
CULINARY HERBS FOR GARDENS. San Diego Poultry Journal, February 25: Culinary herbs add interest to the spring garden, make attractive plants, and have utilitarian value. Dr. Robertson Pratt, assistant professor of pharmacognosy, California College of Pharmacy, says the history and romance behind these plants is worth study. Books he recommends are Alice Morse's Old Time Gardens, H. M. Fox's Gardening with Herbs, and Esther Singleton's, The Shakespeare Garden.

Among the herbs that combine usefulness with ornamental growth he recommends dill, caraway, coriander, fennel, peppermint, spearmint, parsley, thyme, and sage. "They owe their properties" he says, "to their volatile oils, and formerly were imported into the United States at considerable expense. The war has eliminated such importations and the housewife who wishes to garnish her meals with such aromatic delicacies may find it necessary to rely on her own back yard supply during the war."

SEEK SEEDS FOR BRITAIN, RUSSIA. Market Growers Journal, March 1: An effective way to aid Britain from the standpoint of both food and morale is to see that they have an adequate supply of seed for home garden planting. Two organizations in this country are engaged in supplying this seed. Both are following the sound policy of collecting money, buying fresh seed appropriately packaged and distributing to those that can best use them on the other side. American Seeds for British Soil, 18 East 70th Street, New York City, is working in conjunction with the National Federation of Women's Institutes of England and Wales. The British War Relief Society, 730 Fifth Avenue, New York City, has a special committee on seeds. One report indicates there are three hundred thousand allotment holders in England who cannot pay for their seed. We have received word that Russian War Relief, Inc., 535 Fifth Avenue, New York, N.Y., is receiving contributions for seeds for Russia on much the same basis as the above-mentioned agencies are receiving seeds for Britain. Contributions may be sent directly to the agencies mentioned.

MODERNIZATION OF COTTON GINS. Arcadian Grower, March: North Carolina cotton ginners have installed a large amount of new equipment and machinery. In 1935, there were six cotton driers in North Carolina; today there are more than 65. Other items have been improved in much the same ratio. Many of the older gins have been modernized by incorporating the latest findings of the U.S. Laboratory at Stoneville, Miss. This "new era" of better ginning traces to the cotton improvement programs of the U.S. Department of Agriculture, cooperating with the Extension Service of State College, in which unbiased government classing service, as well as appraisal of ginning and other factors influencing grade and staple, have been of immense value to producers, ginners, and everybody concerned.

COTTON DUCK ALLOCATED. Office for Emergency Management release (WPB 422): Division of Industry Operations, in General Preference Order M-91, effective February 28, allocated the bulk of the Nation's output of cotton duck to the armed services and the remainder to essential civilian needs.



The Daily Digest

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Washington, D.C., March 23, 1942

PUREBRED LIVESTOCK AFTER THE WAR. Breeder's Gazette, March: A purebred sow sells for \$2,000 at public auction? What does this mean? It means that there is money in producing pork to grease the wheels of war. But something more: It means that after the war is over this land of ours will be the purebred nursery of the world. Every day or so we hear that the Dutch government is buying farms in Ohio or Iowa for the establishment of replenishment herds. After the war is over Holland must be re-populated with improved cattle. The forward-looking farmer will key his work right into that trend. He will maintain and improve his pedigree herds.

INCREASED PRODUCTION FROM FERTILIZER. Southern Planter, March: Surveys by the National Fertilizer Association and other sources of information show that only about one-sixth of the total acreage of harvested crops in the United States receives fertilizer in any one year. However, the increased production on the fertilized acres amounts to something like 15 percent of our total farm production. This figure varies greatly for the different crops. For example, it is 44 percent for tobacco, 25 percent for cotton, and only 6 percent for oats. It also varies greatly for the different states, ranging from 76 percent in Florida down to 2 percent in Texas.

CELLOPHANE-USE RESTRICTIONS. Washington report in Western Tobacco Journal, March 3: WPB limitations on use of cellophane and other transparent wrappers permit their use as primary wrappings for foods and drugs. Experiments are being conducted to determine whether the transparent materials laminated on paperboard can be used as a substitute for tin and metal containers. Because they require less woodpulp in their manufacture, transparent wrappings may be considered also as a substitute, wherever possible, for paper boxes.

March 23, 1942

WPB SUGGESTS "TRANSPORTATION CLUBS." Business Week, March 7: In a drive to conserve tires and take some of the load off public transportation facilities which carry employees to defense plants, the War Production Board is asking all workers who own private automobiles to establish "informal transportation clubs." The idea is to pool commuters who come to work from the same direction in the same car for one week and then use another the next week. Some managements and unions are already helping to organize such plans in their plants. One "Victory Car Club" is set up on a community basis near Chicago and has over 1,000 cars in its pool.

TRADE-IN ON ALUMINUM WING BANDS. Poultry Supply Dealer, March: Poultrymen will have to return one and a half pounds of scrap aluminum bands to manufacturers for every 1,000 new wing bands they secure for the 1942-43 season, according to a recent War Production Board bulletin. No bands will be obtainable except on the exchange basis. Only sheet aluminum scrap can be accepted. Cast aluminum cannot be used.

BURNING GRASS LOWERS GRAZING YIELD, INJURES WIRE FENCES. Agricultural News Service (Okla. A & M. College): Farmers are again warned against "burning off" their pastures, this time in the interest of national defense. Investigations at the Oklahoma Experiment Station show that burning off may produce slightly better quality pasture for one or two months in the spring but that the yield for the grazing season as a whole will be lessened. Weeds also are more prevalent on "burned off" pastures because the heavy seed crops of the weeds are less likely to be destroyed by fire.

The agricultural engineering department says destruction of the wire fence outweighs any doubtful good that burning of fence rows and fields will do the soil. The wire in burned fence rows will be irreparable, as the heat draws out the temper from the metal, leaving the wire soft and easily broken. Farmers will become more careful in handling wire fences since purchase of new wire is almost impossible.

ILL. VEGETABLE ICE CREAMS. Department of Dairy Manufactures, University of Illinois, in Market Growers Journal, March 1: In our experiments with vegetable ice creams the idea was to determine possibilities for using vegetables in place of some of the more expensive ice cream flavors, particularly those that contain added sugar. The most successful vegetable ice cream was the one flavored with carrot. This product was similar to pumpkin ice cream. Other vegetables tried were peas, corn and spinach. While vegetable ice cream would not likely appeal to a large percentage of consumers, certain vegetables might be used in this way, particularly from a health angle.

DRIED MUTTON TEST SHIPMENT. National Provisioner, March 7: An experimental consignment of Australian dried mutton, intended as an emergency food supply, has been shipped to Great Britain, an Australian meat trade publication announced recently. The shipment followed meat-drying experiments at the Homebush abattoirs in Sydney, Australia. Meat treated by the new process is reported to resemble mincemeat.

March 23, 1942

FIRST N.J. FARM WOMEN'S MARKET. New England Homestead, March 7: The Atlantic Farm Women's Market Association recently opened a market, the first of its kind in New Jersey. Operated entirely by the farm women who make up the association, it offered fresh fruits, vegetables, and flowers from the members' gardens, dressed chickens and ~~fresh~~ eggs from their families' farm flocks and pies, cakes, jams, jellies, canned goods, breads and specialty dishes made from favorite recipes in home kitchens. Among members of the group are women native to France, Germany, Hungary, Sweden, and Italy, and they offered dishes popular in their countries.

The County Board of Agriculture made promotion of the market part of its Land Use Planning Program. The Farm Security Administration gave a helping hand by lending money to women who needed it to buy stock, while the State Board of Health cooperated with the group in setting up standards which require physical examinations of all members, strict cleanliness in home kitchens, testing of the water supply. The places of the men who have been conscripted for the army and navy will have to be filled by many of progressive and industrious women, and there is no reason why farm products cannot be marketed by women. County Agricultural Associations and county farm agents should encourage the establishment of similar enterprises in every rural community.

"HIDDEN HUNGER" MOVIE. New York report in Northwestern Miller, February 25: An important food motion picture, Hidden Hunger, starring Walter Brennan, had its official preview in Washington, D.C., February 18. The picture, produced in Hollywood, will be presented in theaters throughout the country. The film was financed by Swift & Co. but contains no advertising or commercial material of any kind. Each of the protective foods is given such attention in the picture as accords with scientific standards. National organizations, such as men's and women's clubs, educational groups, youth organizations, ^{trade unions} are requested to help promote the film as part of their effort on the health front for national defense. The film is also being made available for showing in regular motion picture houses.

LEVEL LOCATES CONTOUR-PLOWING LINES. Popular Science, April: Article by Milwaukee, Wis., SCS, member says a man in Red Wing, Minn., has adapted a low-priced carpenter's level for laying out contour-plowing lines. A metal plate is screwed to each end. One plate has a peephole, the other a wire sight soldered across a cut-out section at the same height as the peephole. A mirror is glued into a slot to reflect the spirit bubble to the user as he takes a sight.

The level is mounted on a leg or tripod at a fixed height. A helper carries a rod calibrated in feet and tenths of feet or inches and having a movable target. The rodman moves this from point to point along the line, going uphill or downhill until the surveyor sights the target at the same height as that of his level, with the spirit bubble between its centering lines. Stakes are used to mark out the contour line thus established. Other lines are marked in the same way, or else from the first one by setting the target at a suitable height.

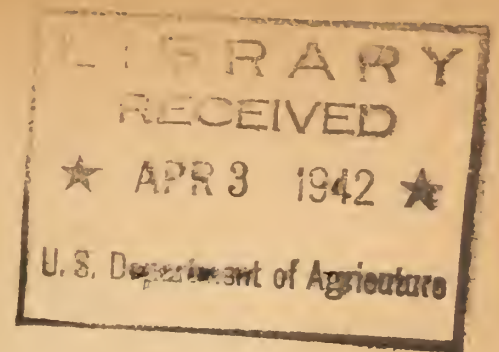
NIACIN AND NICOTINIC ACID. A.M.A. Journal, March 7: A poor name handicaps promotion of a meritorious product. To the general public the word "nicotinic" implies too strongly the relationship of the vitamin to nicotine, the chief alkaloid of tobacco often used as an insecticide. The term "acid" denotes a corrosive substance such as the liquid used in automobile storage batteries. Although nicotinic acid was first produced from nicotine, and even now a small proportion of this substance is being produced commercially in this manner, the implication that tobacco is contained in enriched bread is far from true. Most of the nicotinic acid of commerce is produced by the oxidation of beta-methylpyridine, a coal tar derivative. Although nicotine is a toxic substance, nicotinic acid is a vitamin essential to life.

As reported elsewhere in this issue a committee of the Food and Nutrition Board of the National Research Council has selected as suitable synonyms "niacin" for nicotinic acid and "niacin amide" for nicotinic acid amide. The Council on Foods and Nutrition has approved these synonyms for preparations that come within its scope.

REFRIGERATOR-CAR MANUFACTURE. Refrigerating Engineering, March: While the manufacture of refrigerator cars declined in dollar volume from \$21,000,000 in 1923 to less than \$2,000,000 in 1939, this business is now revived because of the demands of the war. In completing the \$5,000,000 contract involving 1,000 refrigerator cars for the Pacific Fruit Express by a Renton, Wash., plant, latest developments in materials and fabrication methods were applied. At this plant, covering almost 50 acres of ground, 12 refrigerator cars per day, one every 40 minutes, were completely finished in every detail—ready to go into service. Auxiliary feeder operations, where parts were prefabricated, extended on both sides of the main assembly line, which back-tracked to an extension almost a mile in length. Twelve times during a working shift a whistle blew as a signal to move all units forward one spot on the line.

GOVERNMENT EGG-GRADING PROGRAM. Article, Uncle Sam, Egg Grader, in Poultry Tribune, March: The majority of large-scale egg producers in states where the grading service is available are marketing their eggs on a graded basis. They are finding that it pays dividends. The supervisor of Federal-State egg grading work in Ohio, has reported that New York quotations on top-quality eggs were about nine cents higher than quotations on eggs of similar quality at the Cleveland market before the egg grading program was started. But the demand for good eggs has increased within the state and the spread has been narrowed to an average of about five cents. In other words, the grading program has meant an average gain of about four cents to producers of top-quality eggs.

The Federal-State supervisor in Michigan has made studies indicating that the egg grading service has increased returns to producers in two ways: Producers selling their eggs through the grading stations have netted two and a half cents a dozen more than the current buying price. And the current buying price in localities served by egg grading stations is two cents or more higher than in territories where grading is not available.



The Daily Digest

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Washington, D.C., March 24, 1942

FFF PLAN IMPROVES OUR HEALTH AND HELPS FEED OUR ALLIES. Morse Salisbury, Director of Information, in School Executive, March: The implications of this (FFF) program are vast. Its consequences will be far reaching. Its effects upon education will be so marked that full understanding of the program should be ensured in every school in the country. There is, for instance, an extremely close relationship between nutrition and learning ability; the intelligence and emotional nature of a child are not fixed hereditary factors. Like the adult, the child lives in an external environment and surrounds an internal environment.

The chemistry of the bodily fluids which bathe the tissues constantly, and which also perfuse the brain and determine its functional efficiency, is not rigidly fixed. Minor variations in the chemistry of these fluids, brought about by mineral, vitamin, or other nutritional deficiencies, can curtail the natural development of a child, work permanent injury upon his higher nerve centers, and change his disposition and intelligence fundamentally.

The soundest minds do, as a general rule, tend to exist in the soundest bodies. It has long been observed that undernourished children are inattentive, lack nervous and physical energy, comprehend their school tasks slowly and poorly, have a poor memory for their school work, and exhibit general nervous restlessness. Certain studies have been made which correlate low nutritional status with a high rate of retardation, absences, and low average marks in school. These findings are very important for educators in the light of the School Lunch, Penny-Milk, and FFF Programs.

USED FARM MACHINERY AUCTION. Washington Farmer, March 12: An idea applied in an eastern farming community holds interesting possibilities. Farmers in the community found there was a considerable amount of farm machinery in usable condition remaining idle on their farms. All such machinery was brought together at a central point and an auction was held. Three local auctioneers donated their services. Farmers needing machinery were enabled to buy used equipment at moderate prices without contributing to a shortage of new machinery; farmers having old machinery were enabled to put it to productive use and turn an honest dollar at the same time.

March 24, 1942

PAPER SUPPLIES IN 1942. Business Week, February 28: For the better part of two years, paper users everywhere (about 300 lb. per year for every man, woman, and child in the U.S.) have been disquieted by an ever-impending paper shortage. Yet during the same two years, domestic production of pulp from which paper is made jumped 42%. Final figures won't be ready for some time to come, but preliminary estimates of the U.S. Pulp Producers Assn. show 1941 domestic wood pulp production of all grades to have been 9,978,000 tons (of 2,000 lb., air dry weight basis). Production was 6,993,000 tons in 1939; 8,852,000 tons in 1940; 3,760,000 tons in 1932, worst year of the past sixteen. Top 322,000 tons off 1941 production for export, add 1,145,000 imported tons and 267,000 tons taken from stock, and you arrive at an estimated 1941 consumption of 11,068,000 tons of pulp, enough with additions of re-used waste paper to make over 20,000,000 tons of paper and paper products (bags, cups, decorations, etc.). And that does not include the thousands of tons of newsprint shipped in from Canada and Newfoundland in finished form ready for the presses. No "run" on mill or merchant stocks of paper, corresponding to the recent housewives' run on sugar, is expected. Too many paper buyers are cognizant of the enormous amounts of paper that are being released by just the change over of automobile and electrical-appliance plants to war production. Estimates on the amount of pulp required directly and indirectly by the government for explosives, packaging, lend-lease, and just plain paper work run in the neighborhood of 6,000,000 tons (100 tons of drafting paper and blueprints are said to be required in building a single battleship). In view of the less than 4,000,000 tons of pulp required for all purposes during the depths of 1932, it should be clear that essential civilian requirements could be whittled a lot without pinching anybody too much.

WORLD AGRICULTURAL CO-OPERATION. London report in Northwestern Miller, February 25: R.S. Hudson, British Minister of Agriculture, speaking recently to a group of farmers, urged international cooperation directed to organizing agriculture so the land of the world was properly farmed. Today the farmers of the world had the productive capacity to insure, without robbing the fertility of the soil, so that no man, woman or child need go hungry. This should be the aim of agricultural policy and international co-operation. However, if it were to be secured farmers must receive a fair return from their labor. Indiscriminate production, cutthroat competition only led to the farmer or the land being exploited.

After the war, farmers must see to it that equipment did not rust, that the land did not fall back, that the farmer and his workers earned a reasonable return for their labor and their risk. This meant the nation must be prepared to pay a fair price to the producer of food. It was not only the primary producer in this country who was demanding a reasonable price. It was the primary producer in every country in the world, for, speaking generally, there has been a tendency in recent years practically everywhere, to exploit agriculture for the benefit of industrial and commercial interests.

INSECTICIDE, FUNGICIDE SUPPLY. Market Growers Journal, March 1: L.E. Hitchner, secretary of the Agricultural Insecticide and Fungicide Association says: "We have made a careful survey of supplies of various insecticides and fungicides and at the present time the status of these materials is as follows: Supplies of sulphur, chemical lime--plentiful. Supplies of nicotine sulfate--adequate. Supplies of oil sprays--plentiful. Supplies of arsenical materials--adequate at the present time. Supplies of rotenone products--possibly short."

March 24, 1942

QUICK FROZEN FOODS EXPOSITION. Refrigerating Engineering, March: At the second National Quick Frozen Foods Exposition held recently at Chicago, increased interest was shown because of increased restrictions in the use of tin. First Lt. James M. Gwin, of the Quartermaster Corps, in charge of dairy and poultry products procurement, told his audience considerable interest has been shown in quick frozen fruits and vegetables by the Army. The greatest use to date has been in camps, mostly at air fields where large numbers of men are fed at one mess. Frosted foods are most popular in permanent camps than maneuver camps. Donald Barr, manager of the marketing division of a frosted foods corporation, said that only ten years ago there were but 18 stores in the United States selling quick frozen foods as against 25,000 class A and B grocery stores today. During 1941, these stores sold about 385 million pounds of packaged quick frozen foods.

GARDEN TRACTORS HELP EFF. Implement and Tractor, February 28: Garden tractors can be profitably employed on small gardens of some three acres and up. They can be used, not only for the small home gardener, but by commercial growers of vegetables such as the more valuable row crops, including onions, carrots, beets, lettuce, spinach and celery. These narrow row crops require special equipment which so far has only been found in a two-wheeled garden tractor. This is the walking type with a small gasoline engine.

One manufacturer recently stated. "One man with a small two-wheeled, engine-driven tractor and a three-row cultivator can do more and better work than seven men with push hoes or 28 men with hand hoes. Most commercial growing is near cities where defense industries have already taken the workers who formerly helped the growers. Motorized garden tractors will be required to keep these growers in business. In addition, this equipment would permit women and girls to do exactly the same quality and quantity of work, with practically no physical effort except that of walking, that any experienced gardener could do....."

CASTOR BEANS FOR OIL. Texas Farming and Citriculture, March: Investigations of castor beans as a source of oil have recently been reported in a Texas Experiment Station bulletin. Tests were started in 1938 at College Station and several sub-stations.- The highest yields have been obtained at the Lower Rio Grande Valley Station, Iowa Park and Lubbock. The highest average yield during three years from 1938 through 1941 was at the Valley Station, the Flowering variety producing 1,238 pounds of seed per acre. The experiments indicate that the better varieties produce good yields where cotton succeeds. With the present varieties, 800 to 1,300 pounds per acre is about the maximum average yield.

U.S. LARD FOR MEXICO. National Provisioner, March 7: The Mexican government-controlled Nacional Distribudora Reguladora S/A of Mexico D.F., similar in character to the Agricultural Marketing Administration, soon will take final shipment of the 7 million lbs. of refined lard ordered from American suppliers. The bulk of the lard is being shipped in tins, although some is going forward in tank cars. It is understood that the Mexican institution contemplates buying a total of 20 to 25 million lbs. of lard.

March 24, 1942

NEW METHOD OF PAYING MILK PRODUCERS. Madison (Wis.) report in American Milk Review. A new method of paying producers for both fat and the solids-not-fat in milk has been developed by Froker and Hardin, Wisconsin College of Agriculture. The new plan, applicable in all types of dairy plants and operations, including cheese factories, creameries, condenseries, and fluid milk markets, is described in a new bulletin, Paying Producers for Fat and Solids-Not-Fat in Milk. This represents what is said to be the most complete method of purchasing milk so far proposed. It takes into account virtually all the constituents of milk that have economic value, and also recognizes differences in processing costs as well as variations in prices received for the different products made from the milk. All payment plans follow the general pattern of pricing milk on a hundredweight basis with adjustments in this price for variation in the fat and solids-not-fat content of the milk among individual patrons.

CONCENTRATED LEMON JUICE FOR BRITAIN. San Diego Poultry Journal, March 10: The first shipment of concentrated lemon juice to Great Britain occurred recently when the Lemon Products Company of the Calif. Fruit Growers Exchange sent 20,000 gallons to that country. Since this, the by-products plant has had requests for bids on straight lemon juice in cans. Although considerable quantities of concentrated orange juice have been sent to England, there has never been a demand for the lemon product. However, with the health value of citrus becoming more evident, interest in lemon juice, both in concentrated and natural form, is being stimulated. A large portion of the surplus lemon crop could be used in making concentrated lemon juice, if a market for the product can be found.

SOUTH AMERICA STUDIES USDA DIET PLANS. Agriculture in the Americas, March: Diet plans worked out in the United States are being studied and adapted in South America, according to Dr. Hazel K. Stiebeling, BHE food economist. Dr. Simon Mendivil, Chief of the Bolivian Department of Nutrition of the Ministry of Labor, Health and Social Welfare, has written Dr. Stiebeling that educational, military, and administrative authorities of Bolivia have shown considerable interest in a number of Bureau of Home Economics publications. One of them, "Planning Diets by the New Yardstick of Good Nutrition," has been translated into Spanish to facilitate its use.

THE YEAR IN AGRICULTURAL EDUCATION. Under this title, article in Agricultural Leaders' Digest, March, says: Enrollments in vocational agriculture classes continued to advance during the past year. The total enrollment was 596,033, an increase of 11,900 over the previous year's enrollment of 584,133. Classes in vocational agriculture were carried on in 18,849 schools requiring 17,581 teachers; all day classes in 8,786 schools requiring 8,850 teachers; evening classes in 6,377 schools requiring 4,915 teachers; part-time classes in 3,154 schools requiring 3,312 teachers; and day unit classes in 532 schools requiring 504 teachers.

PASSENGER TIRES DOWN 95 PERCENT. Office for Emergency Management release (PM 2710): Quotas of new tires released for passenger automobiles under OPA rationing in the first three months of this year showed a reduction of almost 95 percent from the total replacement shipments reported in the corresponding period of 1941.



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Washington, D.C., March 25, 1942

LONDON MEAT DEALERS MAY POOL DELIVERIES. Butchers' Advocate, March 11: The leading associations of retail meat traders in London have recommended adoption of a uniform scheme of retail deliveries. The main feature of this plan is that no deliveries will be made outside a radius of one mile by any shop with the recommendation that there be not more than one delivery weekly to each customer, except in the case of newspapers. In some localities it is expected pooling of delivery services by groups of retailers may prove practical, but in London and other large cities zoning or limitation is expected to be adopted, because of competition. Although these systems have not yet been put into effect, they will undoubtedly progress more quickly than similar ideas in the United States, since shortages of rubber and gasoline in England will likely become acute more quickly than here.

CARE OF ELECTRIC CORDS. Electricity on the Farm, March: Shortages of copper and rubber are restricting the manufacture of rubber-insulated wires and cords, which are made almost entirely of the two materials. As soon as the available supply of rubber sheathed cords is exhausted, there will be no more for civilian use until the war is over. Cords will be the braided, rather than the all rubber, types. For lamps, radios and household appliances, braided types will serve about as well as the rubber types. For outdoor use, the rubber-sheathed types have advantages.

To keep rubber cords in the best condition, do not subject them to more mechanical abuse than necessary. Avoid sharp kinks and bends; they are hard on the fine copper strands making up the conductors. For storage, lay the coil of wire flat rather than hanging on a nail or hook. Store the cord out of sunshine, because sunshine hastens the deterioration of rubber. Keep the cord in good repair.

NEW PROCESS IMPROVES LATEX. Hide and Leather and Shoes, March 7: A new processing method has been developed in the laboratories of a Boston chemical firm that extends the volume of latex from 50 to 300 percent depending on the use to which it is to be put. The new process retains the major characteristics of the original product and normal, 38 percent latex is returned in the form of a 37 percent concentration while concentrated, 60 percent latex is returned in the form of a 55 percent concentration. The process makes use of a filler material of such fine size that it blends well with rubber particles.

March 25, 1942

ACCELERATOR PEDAL AND FUEL WASTE. Implement and Tractor, February 28: Recently International truck engineers made tests of how much fuel can be consumed by impatiently "patting" the accelerator pedal while the vehicle is standing still. The tests were made on a typical $1\frac{1}{2}$ -ton truck of a type commonly employed in city delivery and hauling service. Idling speed was adjusted to 325 r.p.m. at which speed the engine consumed $1\frac{1}{4}$ gal. of fuel an hour.

Tests were made on the basis of city driving condition where a total of 150 traffic stops are made each day. An average of 45 seconds was allowed per stop, making a total of 1 hr. $53\frac{1}{2}$ min. a day during which the truck was standing still with the engine idling at 325 r.p.m. Fuel consumed idling was only .4675 gal. The same tests proved that by "patting" the accelerator once at each of the 150 stops he would burn an additional $\frac{1}{2}$ pint of fuel a day or, in a 312-day working year he would actually waste $19\frac{1}{2}$ gallons of gasoline. If our "nervous" driver really "beat a tattoo" on the accelerator pedal while impatiently waiting for the traffic light to change, and if he raced his engine ten times in each of the 150 daily stops, he would waste 195 gallons of gasoline a year.

MOTOR FUEL FROM SUGARCANE. Agriculture in the Americas, March: Experiments conducted at Louisiana State University have led to production from blackstrap molasses of a motor fuel called jeanite. While not competitive in price with gasoline, the product is believed to have potential value for the several American republics which have no petroleum but do have extensive sugarcane industries. Most other experiments in the use of grains and similar products for motor fuels have involved the production of alcohol for blending with gasoline. The new process avoids the objections of this procedure by producing entirely from molasses a fuel which is practically identical with gasoline in fuel value and octane rating.

WASHINGTON STATE HOLDS SHOP COURSES. Washington Farmer, March 12: In 85 schools throughout the state some 8000 young men from 17 to 25 years of age will this year make practical mechanics of themselves to enable them to play an increasingly important part in defense. Many of them are driving into town as far as 25 miles five nights a week for periods of eight weeks to learn machinery repair, forge work, welding, electric wiring, motor repairing and the like. Most of them are farm boys who will put their newly developed skill to work helping solve the farm labor problem in order that a maximum of food may be produced for victory. Many of them are high school graduates in vocational agriculture.

OKLAHOMA FFA SALVAGES SCRAP IRON. Agricultural Leaders' Digest, March: Oklahoma Future Farmer members have gathered and sold 1,118 tons of scrap iron, with another 900 tons on hand; have conducted farm surveys in most of the state's 77 counties to determine the number of new farm machinery parts needed this spring; are repairing hundreds of pieces of farm machinery in the FFA shops, and are cooperating with the food for freedom program by planting more acres to home gardens and the essential food and feed crops.

March 25, 1942

WOOD HOOP GRAIN ELEVATOR. Agricultural Engineering, March: An economical grain bin, utilizing materials readily available in any lumber was developed in Dakota wheat country last year to furnish additional storage space for elevators. The wood hoop silo has long been known for its stability, economy, and ease of erection, and it was relatively simple to adapt this principle of construction to the storage of grain. This type of bin was first thought of as an emergency measure, and more or less temporary. After building several of them, however, the operators were seriously considering adopting this type of construction to replace their permanent elevators as replacement becomes necessary. Requests for plans from all of the major wheat-producing areas of this country, as well as from Canada, South America, and Mexico, have been received since the first few bins proved their practicability.

Various systems of wind bracing have been applied and all will be carefully watched. Because the walls of these bins are relatively thin, all filling and emptying must be done from the center. For economical grain storage which can be built of readily available, non-critical materials in an extremely short time, the glued laminated wood hoop method of construction should have serious consideration.

STOCK CHAMPIONS ON HOOF AND RAIL. National Provisioner, March 14: Judging the value of a meat animal on the hoof by the quantity (percentage yield) and the quality of meat it will produce is a difficult task, as indicated by results of carcass judging contests at the various livestock expositions. At the last junior livestock show at St. Paul, Minn., the grand champion steer and the grand champion hog on the hoof in the carcass contest placed well down on the rail. The 1,050-lb. grand champion steer, which sold for \$1,890, was termed "too fat" by the judges and failed to place among the first seven carcasses. Top carcass honors went to an animal which received little recognition in the arena—the sixth place Angus yearling. At the 1941 International Live Stock Exposition, neither the champion steer nor the reserve champion steer when judged on the hoof furnished a carcass good enough to place among the six top carcasses on the rail. The grand champion carcass came from an animal which placed fifth on the hoof.

SILICATE IN PAPER BLEACH SAVES CHLORINE. Business Week, February 21: Through a process developed by a Philadelphia chemist, several large paper mills now are mixing the silicate with their regular bleaching compounds in sulphite pulp. Not only are they getting results, but they report savings in chlorine running from 15% to 40%. The first pilot-plant experiments were tried with six-hydrate metasilicates, but since then a new "five-type" has been developed, which is most universally used. Some of the paper bleachers contend that the silicate reduces the interfacial tension between the pulp and bleach liquor, opens the fiber, and allows the reactions to proceed more easily. The amount of chlorine saved varies, depending on whiteness (or "brightness") standards.

MORE RAYON FOR HOSIERY. Office for Emergency Management release (WPB 428): Division of Industry Operations says larger quantities of rayon will be made available to hosiery and weaving industries under Supplementary Order M-37-c, effective April 1.

March 25, 1942

NEW TYPE FROZEN FOOD LOCKER. Refrigerating Engineering, March:

Recent widespread interest in the frozen food locker system has led to a search for ways and means of getting the material into storage and back to its owner or consumer without his owner having to spend a period in the low temperature storage room. One effort to solve this problem has resulted in a new design—the streamlined locker. The unique feature is a new lock that has a multiple purpose, rather than serving only as an aid to a plug that closes an opening. Cost is reduced by the elimination of hinges and latch, and space requirements are reduced by eliminating the door stile and area required to swing open the ordinary hinged door. The new lock results in a better fit and tighter door closing than can be accomplished with the beveled door, no matter how many seals it may have; it permits the servicing of adjacent lockers, which is prevented by a conventional type swinging door; makes it unnecessary for customers to pull a heavy door open to get at the frozen stores; and lastly, makes readily accessible the locker renter's frozen foodstuff.

BRITISH BAN WHITE FLOUR, BREAD FOR DURATION. Business Week, March 12:

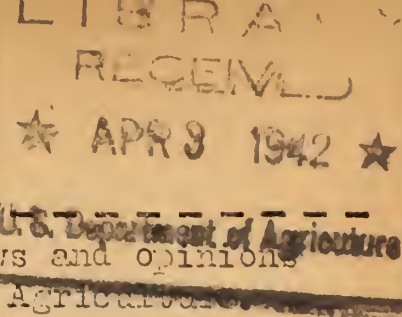
On April 6, British bakeries will sell their last loaves of white bread; on April 20 the last white-flour cakes will appear on tables of the British Isles. After that, for the duration, all Britain will use only whole wheat flour, milled according to standard specifications laid down by the Ministry of Food. Lord Woolton, Food Minister, made the announcement last week. Nearly a year ago the Ministry introduced a "National Wheatmeal Loaf" which was intended to economize on the amount of shipping necessary to bring in the country's wheat supplies, and to provide bread with the greatest possible nourishment with the least bulk of raw material. Shipping authorities estimate that if all Britain turns to the whole wheat flour, it will mean an annual saving of nearly 700,000 tons of shipping space.

GOV. BUYERS OF BUTTER DEMAND QUALITY. Editorial in National Butter and Cheese Journal, March: It is fortunate that government buyers of dairy products are "finicky" about quality. They bid only for products of good quality and, in case supplies become more plentiful, they will undoubtedly raise the standard, below which there will be no sale. Some creamery butter manufacturers apparently don't know it, but making better butter will help them. Millions of consumers still prefer good butter over any so-called substitute and they have the money with which to buy it. Cutting down the time which expires between separating the cream on the farm and taking it in at the creamery will perhaps do more to improve quality than any other one thing.

GUERNSEY COW SETS PRODUCTION RECORD. American Milk Review, March:

A world's record and a new record for the breed has been made by Superb's Faithful, a registered Guernsey cow, owned by Foremost Guernsey Association, Inc., Hopewell Junction, N. Y. Faithful is the first Guernsey cow to make two consecutive records of more than 1,000 pounds of butterfat. Her five records made to date average 17,454 lbs. of milk and 925 lbs. butterfat.

The Daily Digest



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Washington, D.C., March 26, 1942

WEATHER MORE FAVORABLE FOR FARM WORK. Weekly Weather and Crop Bulletin, March 25: While rainfall was heavy in much of the Southeast, with soil too wet for field operations and delaying spring work, it was lighter in the interior valleys. Considerable wind facilitated drying of soil. However, in the upper Mississippi and Ohio Valleys field operations were confined largely to higher ground with lighter soil, as lowlands continued too wet to work. Some plowing and spring seeding were accomplished as far north as the central Ohio Valley. In the south Atlantic area work was fairly active with much spring planting of home gardens and truck crops. In trans-Mississippi States, conditions improved decidedly and garden and truck planting became active to central Missouri. From the Mississippi Valley eastward farm work is considerably behind a normal year.

Rain is still needed in most of Texas and some other southwestern sections. While subsoil moisture is abundant, in the Southern Plains much sunshine and high winds dried the topsoil rapidly and there was some local drifting. Otherwise, the general moisture situation is satisfactory, with dry weather needed in most sections from the Mississippi Valley eastward. There was some frost damage in the interior of the Pacific Northwest, but in the south Pacific area crops generally are growing satisfactorily.

With continuation of mild temperatures in the principal producing areas, winter wheat made substantial growth in southern sections of the belt and perceptible greening up was reported from northern areas. In Missouri wheat made rapid growth; some improvement is noted in Texas and satisfactory progress in Oklahoma; jointing is reported from Oklahoma. Excellent growth continues in the western two-thirds of Kansas, but in the east damage by fly and excessive moisture is becoming more evident, with some abandonment. In the northwestern Plains and generally west of the Rocky Mountains, wheat continues to maintain satisfactory condition.

U.S.D.A. WAR BOARD. Secretary Wickard, by memorandum No. 960, Supplement 3, has changed the name of the Agricultural Defense Board to the U.S. Department of Agriculture War Board.

March 26, 1942

SHOE STYLE PLAN WOULD CONSERVE LEATHER. Hide and Leather and Shoes, March 7: In the first World War, the shoe industry produced large quantities of footwear which required extravagant use of leather. Styles were carried to extremes. Prices soared while quality standards were generally lowered. As a result of this situation the Government formulated a control plan which limited colors, styles, grades, and prices of foot-wear. There is evidence that some such plan is now needed. The demand for footwear is at an unprecedented high level. The Government needs a lot of shoes for men in the service; our allies need a lot of shoes to supplement their own production; civilians are buying more shoes and as they are more active they must be kept reasonably well shod. There appears to be enough leather and other materials in sight to make all the shoes that are needed (not necessarily all that are wanted).

WARTIME STORAGE PROBLEMS. Business Week, February 21: Members of the American Warehousemen's Association, assembling at French Lick early this week for their convention, agreed that as yet there is no actual shortage of storage capacity. But, they declare, when munitions and foodstuffs for export begin coming from production lines in the volume eventually scheduled, we are sure to meet a storage crisis.

Many war-created storage requirements are obvious; stockpiling, military supplies, accumulation of lend-lease cargoes, and the like. But the war creates other, equally necessitous demands upon the warehousemen. When a reserve officer goes to active service and his wife goes home to her mother, or when a business man moves to a Washington apartment and leases his old home unfurnished, the shift sends furniture to a warehouse.

Much of the automotive machinery pushed out of Detroit factories by airplane-making equipment will probably find its way to public storage. When the Normandie was being stripped of her fittings before the fire, ton after ton of furniture and fixtures was trucked into New York fireproof warehouses.

USE OF SWISS CHEESE RIND IN PROCESS CHEESE. National Butter and Cheese Journal, March: By use of a special type of hamermill Swiss cheese rind can be reduced to a fine powder which is ideal for blending with other cheese. Up to one-third of the batch may be replaced by rind without impairing the flavor, body, texture or slicing qualities of the finished loaf cheese. A higher overrun is possible because of the low moisture content of the rind. Another use for the pulverized rind is a base for the manufacture of grated cheese. A blend of Swiss cheese rind and Argentine Sprinz makes an excellent grated cheese product. This process has been used commercially for the past one and a half years in two different cheese plants and has given excellent results. Extension of its use would no doubt increase the amount of processed cheese available and lower the cost of production.

SPEEDY MILKING IS BEST. Electricity on the Farm, March: The Geneva Experiment Station in New York has conducted tests that show milk production to be maintained more uniformly throughout the lactation period if cows were milked with the milking machine in four to five minutes instead of taking nine or ten minutes per cow. They found that cows can be trained to milk out rapidly without a lot of hand stripping. The machine should be removed promptly after the cow has been milked. One operator with two single units should milk twenty cows per hour.

March 26, 1942

URGES CAREFUL HANDLING OF HIDES. Butchers' Advocate, March 11:

Those in the meat industry who handle hides should use every possible care. In the war emergency, leather is becoming more important, as in the last war. Men use many more pairs of shoes a year in the army than they do in civil life. The rigors of war require the use of more leather, and with the shortage of rubber and the recent government order curtailing rubber heels, great quantities of leather will have to be used to fill this one particular need. It is unpatriotic to be wasteful and careless. Flesh left on the hide not only is a meat waste, but also tends to rot the hide.

FORM COMMISSION ON MARITIME AFFAIRS. Agriculture in the Americas,

March: To expedite agricultural and industrial exchange between the Americas, a Commission of Experts on Maritime Affairs has been formed to plan efficient use of foreign flag vessels lying inactive in ports of the American continent. Members of the Commission are Don Augustin Huneeus of Chile, Ambassador Ernesto Jaen Guardia of Panama, Mario Collazo Pittaluga of Uruguay, and Lloyd Swayne of the U.S. Maritime Commission, with Dr. Hector David Castro, Minister of El Salvador, serving as chairman. The plan is that vessels now in American ports shall be utilized to defend the economies of the American Republics as well as the peace and security of the continent. Functions of the commission will include recommendations for allocation of particular vessels to trade routes; diversion of at least minimum shipping facilities to nations not adequately served; and efficient scheduling where more than one shipping line serves an individual port or nation.

TO PROMOTE MILK IN CHICAGO MARKET. Milk Plant Monthly, March:

Through a new plan of cooperation between producers and distributors and handlers of Grade A Milk, the Milk Foundation of Chicago is launching a campaign to increase consumption of milk. Producers and handlers agreed to support the program on the basis of a penny per hundred weight on all milk marketed through the Federal Milk Market Administrator's office. Contracts have been signed with the foundation by over 100 organizations selling the Chicago market which authorize the Market Administrator to collect one-half cent from producers' organizations and one-half cent from handlers, which funds will be administered by the Board of the Foundation.

TO AID FARM FAMILIES DISLOCATED BY MILITARY LAND ACQUISITION. War

Letter for Agriculture, March 6: Secretary Wickard has set up procedure for assisting in relocation of farm families who must move because of acquisition of land for military uses. The Office of Agricultural Defense Relations receives the initial notification that the land is being considered. OADR's Director is a member of the WFB Plant Site Board and represents agricultural interests. When the project is sufficiently advanced, OADR advises Departmental agencies, including State War Board, Extension, FSA, AAA, BAE, SCS, FCA, Forest Service, and FEA. Regional or State representatives of the agencies work out a cooperative plan for making Department services available to families involved. The State USDA War Board selects a committee to meet with the farm families and maintain liaison with War and Navy Department people on the spot.

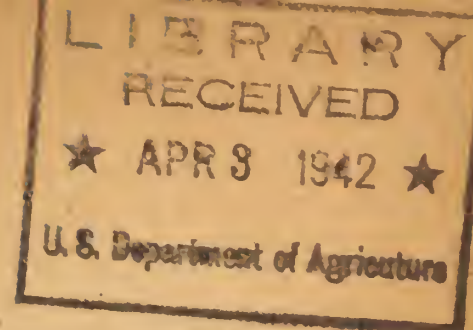
March 26, 1942

WESTERN CANADA LEADS HOG OUTPUT. Dominion Department of Agriculture, Ottawa, March 11: In the years immediately prior to World War II the large proportion of Canadian hogs was produced east of the head of the Great Lakes. Now with a large surplus of wheat on hand and a wheat acreage reduction policy in operation last year, farmers in the Provinces of Manitoba, Saskatchewan and Alberta have increased hog production to the point that they are now producing well over half of the total produced in Canada.

The explanation for this important shift in agricultural production is bound up with feed grains. While Eastern farmers have been hard put to produce anything like increased quantities of feed necessary for larger dairy, hog and poultry enterprises, western farmers have as yet only begun to scratch the surface of increased coarse grain production. Western hog production can be expanded almost indefinitely as long as the demand for pork products continues, while further large increases in eastern Canada could only be achieved at the expense of some other lines of production also in demand at the present time.

TRENDS OF THE TIMES. Business Week, March 21: First signs of spring at Great Lake ports are dense clouds of smoke as ships steam up preparatory to their first ice-breaking trips. This season operations will be different; no autos but much more iron and coal.....The 43 different varieties of motor car tags now used on government-owned cars are to give way to a single design, a modified Union shield, traced in blue, on a white background, with red lettering.....An oil company has tentatively approved plans for a \$3,000,000 indoor oil field in residential Los Angeles. Deep drilling will permit tapping lower sands of an abandoned oil field. By concentrating the gathering of the crude oil in a large concrete pump house, the community will be spared an unsightly derrick field and the noise and odors that go with it.... By means of a self-contained power plant, a trailer-type fire-fighting unit made by a food machinery company generates and projects an enveloping fog. It has been extensively tested on all types of fires.....Only 13 ounces of metal are required for building and installing a new double-hung window unit, as against 26 pounds of metal for window weights, weather strips, pulleys, etc., in the average window. Hardwood on pyrex glass axles is used for pulleys; concrete mixed with iron ore is used for weights. Pressure weather strips made of hard maple loosen automatically while the window is being raised or lowered, and tighten up immediately.

PLAN FOR IMPORTATION OF TECHNICAL PUBLICATIONS. Science, March 13: Seven national library associations, working through their Joint Committee on Importations, have been engaged since 1939, on problems involved in importation of library materials in time of war. The committee has succeeded in completing negotiations which will make possible importation during 1942 of a limited number of copies of scientific and technical periodicals and continuations from all countries of Europe, except Russia, Sweden, Switzerland, Spain and Portugal. Information may be obtained from the chairman of the committee, Thomas P. Fleming, medical librarian, College of Physicians and Surgeons, New York, N.Y.



The Daily Digest

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Washington, D.C., March 27, 1942

INDIAN ECONOMIC RESOURCES. Business Week, March 21: During the next few weeks decisions of momentous long-term importance to American business are scheduled to be made in India. Few Americans realize India's industrial potentialities because, under British tutelage, India has been developed mainly as a large-scale producer of raw materials, a source of revenue, and a market for British goods. India is the world's biggest producer of sugar, jute, and mica. It's also the leader in hides and skins, but fewer than half of the people in the country wear shoes. Its cotton crop is second only to the United States, and it ranks right alongside this country in tobacco. It also has a modest production of copper, chrome, and magnesite. India possesses hydro-electric power resources second only to the United States, but barely 3% of these are now utilized.

BAI SUGGESTS SUGAR SUBSTITUTES IN MEAT CURING. National Provisioner, March 14: A circular letter of the Bureau of Animal Industry this week urged packers and sausage manufacturers to conserve sugar and substitute, wherever possible, a less highly refined form for the granulated sugar or refined corn sugar customarily used in curing. Investigations such as are reported in U.S.D.A. Bulletin 928, Substitutes for Sucrose in Curing Meats, have shown that forms of sugar other than refined cane, beet or corn sugar can be used successfully in curing. Edible sweetening substances such as honey, maple sirup, refiner's sirup, sorghum sirup, corn sirup, raisin sirup and partially refined corn sugar have been successfully substituted for the more highly refined sugars.

MUNG BEAN PRODUCTION. Under this title, paper in Agricultural Engineering, March, says: The mung bean is growing in favor. It is more drought resistant than the soybean and easier to harvest than the cowpea. Two varieties are now grown, the golden and the green, the latter seeming to produce heavier yields of seed and grow taller, making it readily adaptable to combine harvesting. Yields of seed range from twenty to thirty bushels per acre during favorable seasons on good ground. The forage yield is increased by sowing with the ordinary grain drill, but maximum seed production is obtained by drilling in rows with the corn planter, using a kafir plate. While now a minor crop, the mung bean should grow in importance and be free from such intricate problem of harvesting as is represented by cotton, castor beans, and vetch.

March 27, 1942

SEES DECLINE IN GREAT LAKES GRAIN MOVEMENT. Duluth (Minn.) report in Northwestern Miller, March 11: Extreme demand put on vessels by iron ore movement may have a decided deterrent on movement of grain via the water route this year. Grain men cite the lack of boat tonnage, with vessel brokers indicating lack of boats for grain shipping at the opening of navigation. There is talk of starting lake transportation as early as weather permits this year. An early beginning would be a big boost for the coal and iron ore industry, the latter expected to be called on to haul some 10,000,000 to 12,000,000 tons more than transported east last year.

YOUR CONTRIBUTION TO THE WAR PROGRAM. Secretary Wickard, in a memorandum to Washington employees on this subject, says.....The five classes set up by the Budget Bureau do not place any (Department) agency in the category of not contributing to the war program.....The Department of Agriculture and every single employee in it will be a factor in helping to win this war. I urge every one of you to carefully review your status in this Department to determine whether or not you in your specific position are contributing to the war effort of this Department. Most of you are in positions that are most essential to the success of our present agricultural program and its part in the war effort.....

WPB ORDERS ON USE OF CRUDE RUBBER LATEX. Victory (OEM) for March 10: The War Production Board has added several groups of products to lists of permitted uses of crude rubber and latex, but at the same time ordered general reductions in amounts of both rubber and latex permitted to be consumed in specific articles. Examples of increases in permitted consumption rates are rubber-lined tanks, pipes, and fittings, which may now use rubber at a rate of 140 percent, compared with 100 percent under the previous order; and electricians' gloves, 200 percent against 100 percent. Among reductions are fire and mill hose--from 180 percent to 40 percent; suction and welding hose--from 140 percent to 100 percent; and conveyor belts--from 140 percent to 125 percent. An addition to List "B"--products for which permission to use crude rubber must be secured--is thread for industrial shoes, sanitary belts, and surgical supports. Corsets, brassieres, and foundation garments are still excluded from the crude rubber and latex lists.

SUPERPHOSPHATE PRODUCTION INCREASES. American Fertilizer, February 28: Production of superphosphate in 1941 was at a new high peak for recent years. Output at plants of acidulators who report to the National Fertilizer Association exceeded 1940 by 11 percent. It was three times as large as production in 1932, which marked the low point of the depression. Production in each of the last eleven months of 1941 was well above that in the corresponding month of 1940. Aggregate production of plants in the South increased somewhat more than did production in the northern area.

FARM BUREAU PLAN SAVES TIRES. Farm Journal, April: To save tires and keep the mileage figure down on farm cars, the Fayette (Iowa) County Farm Bureau board has worked out this plan; All meetings of township bureaus and 4-H clubs will be held on the same night each month and at the same location (though in different rooms) instead of three different nights in each township as in the past. Thus, the whole family can make one trip each month for all the meetings.

March 27, 1942

NATIONAL PEACH COUNCIL FORMED. American Fruit Grower, March: Ten major peach-growing states, mostly of the East but including Washington State, sent peach growers and specialists to a meeting in February at Charlotte, N.C., to form a National Peach Council. The organization is to concentrate at the start on important objectives: (1.) Development of publicity through State and Federal agricultural agencies, press, radio, national food manufacturers, utilities, and other agencies. (2.) Development of peach selling aids in cooperation with wholesale and retail distributors, national food manufacturers, state marketing specialists, and other groups. (3.) Development of byproduct outlets for peaches, such as home canning, commercial canning, frozen and dried fruits, juices, etc. (4.) Development of a/cull¹-tree-removal program. (5.) Development of marketing agreements in areas where these are particularly adapted. (6.) Development with USDA and state colleges of agriculture of research into health and nutrition values of peaches, new byproducts uses, better production, packaging and marketing practices, better varieties, etc.

INDUSTRIAL RESEARCH IMPORTANT NATIONAL RESOURCE. Article by this title, in The Index (Spring): says:

It is difficult to reconcile the concept of progress which is the philosophy underlying industrial research with the objectives of applied science today. There are indications that the war has stimulated research activities to a major extent, with the chief purpose, of course, being the improvement of instruments of destruction. Past experience shows, however, that out of the discoveries made in time of war improved methods and products are developed for the cultivation of the arts of peace. Nor is that all. It is characteristic of American business that even today while the major orientation of industrial research is towards war, plans are being made for the peacetime years to follow.

After-the-war planning has become the immediate problem of at least a portion of the nation's research facilities with a view to use of new or greatly improved products to attract sales when peace is resumed. In addition, through research it is generally hoped to reduce manufacturing costs to a point where it will be possible to market such products at lower prices, thus retaining and expanding markets. Besides developing new ideas and products and reducing production costs, a great deal of study and research is being given now to the problem of post-war marketing. In the midst of destruction, the creative instinct of man persists in exerting itself, sustained by hope and confidence that a free and better world will emerge.

ROTPROOFING AGENTS FOR SANDBAG CLOTHES. Canadian Textile Journal, March 13: Method of applying rotproofing treatment to sandbags is given by E.F. Armstrong, chairman, Advisory Committee of the British Ministry of Home Security, in a committee report following the study of the entire question including the causes of rotting. New processes of rotproofing (C.T.J., Nov. 21, 1941) are expected to give the bags a useful life of two years. The choice of a suitable rotproofing agent has been narrowed to three classes, viz.: specified tar distillates; organic copper salts; cuprammonium. The proofing agents may be applied to fabric, bag or revetment as a liquid, a solution, or an emulsion.

March 27, 1942

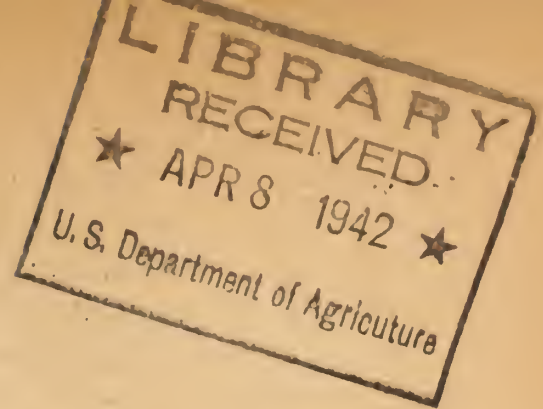
CANADIAN WOOL GRADED IN 1941 SHOWS LARGE INCREASE. Dominion Department of Agriculture, Ottawa: With the introduction of wool grading regulations in Canada in 1941 the volume of wool graded reached 8,783,223 pounds compared with 4,058,754 pounds in 1940 when grading was still on an optional basis. The 1941 figure includes most of the shorn fleece wool handled through commercial channels. The grading regulations do not apply to pulled wool, washed wool or fleece wool used in home handicrafts. Canadian wool requirements have been substantially increased in the last few years due largely to the manufacture of military clothing, and with recent war developments threatening to restrict imports the quantity and quality of the home product assumes greater importance.

LIVESTOCK MARKETING PROBLEMS. Under this title, article in Journal of American Veterinary Medical Association, March, says: While there has been much talk about decentralization of the meatpacking industry, the truth is ownership and control has tended toward greater centralization. The result is that buying of slaughter livestock is probably more centralized today than at any previous time, all factors considered. Of the federally inspected slaughter in 1937, four concerns--four buyers--took 5 of every 10 hogs, over 6 of every 10 cattle, 7 of every 10 calves, and 8 of every 10 sheep and lambs. So, no matter where or how producers sell, approximately 2/3 of all meat animals slaughtered under federal inspection go to one of four buyers.

How different is the setup on the selling side. Last year, 1940, 25 percent of the cattle, 39 percent of the calves, 53 percent of the hogs, and 36 percent of the sheep and lambs (U.S. inspected slaughter) were sold outside the public stockyards--were not offered for sale in the public markets. Consider the multitude of local buyers, of local stockyards and concentration yards and auction markets and packing plants, through which producers disposed of this livestock and one begins to appreciate how far decentralization in livestock selling has gone.

URGES FOREST-FIRE PROTECTION PLACED ON WARTIME BASIS. Science, March 20: The American Forestry Association, in an open letter to Congress, urges that forest fire protection be placed on a war-time basis. Shortage of employable labor in the forest regions because of military service and demands of war industries, coupled with the curtailment and diversion of the CCC, heretofore an important link in forest fire protection, were given as reasons for the growing fire peril to vital timber resources. Recommendations that a war priority rating be given forest protection and that the CCC be reappraised in the light of a streamlined, mobile resource protection force with the status of an essential war agency were made.

Back of these recommendations is the important fact that forest resources are now being heavily drawn on and must continue to be heavily drawn on in prosecution of the war. According to the association, the war already has called for 2,500,000,000 feet of lumber from the nation's forests, and the War Department has let contracts for upwards of a billion feet more. Wood is needed in great volume for airplanes, cargo and fighting ships, construction of training camps and cantonments, crates for shipping food and equipment to the battle fronts, and scores of other war-needed products.



The Daily Digest

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Washington, D.C., March 30, 1942

4-H MOBILIZATION WEEK ON FARM-HOME HOUR. The Farm and Home Hour radio program on Saturday, April 4, will be devoted to 4-H Mobilization Week. A letter from President Roosevelt will be read; and Secretary Wickard, Extension Director Wilson, and several 4-H Club members will speak.

BDI CHEMIST TO RECEIVE AWARD. Science Service release, March 19: For research on causes of spoilage in milk fats, leading to savings of millions of dollars annually to the dairy industry, Dr. George E. Holm, biochemist of the Bureau of Dairy Industry, has been awarded the Borden Company prize of \$1,000 for outstanding scientific work on the chemistry of milk. The prize will be presented at the 103d meeting of the American Chemical Society at Memphis, Tenn., April 20 to 24.

POULTRY INDUSTRY NEEDS THE VETERINARY PRACTITIONER. Under this title, article in Journal of American Veterinary Medical Association, March, says: One lag in veterinary practice in the poultry industry is delayed diagnosis. At present, the poultryman does little about the problem of disease in his flock until several weeks have elapsed and a number of birds have died. Here is a situation where immediate diagnosis is of untold value in controlling spread of the infection. In case the poultryman is unaware of the help the local veterinarian could give him (all too many fall in this group) he consults his local hatcheryman, feed dealer, or perhaps the county agricultural agent. In some cases he sends a few sick birds to a laboratory for diagnosis. The shipment of these diseased birds not only may spread infection to healthy breeding stock in the same express car, but also further delays the answer. When the diseased specimens arrive at the laboratory, the diagnostician may need several days to diagnose the case differentially.

By the time diagnosis has been completed and information is available for the poultryman much of the trouble has already occurred. In many cases the resistant birds have recuperated and the more susceptible ones have died. This is frequently what happens when a remedy, drug or medicine is thought to be effective with chickens.

March 30, 1942

ADVANCE CLEARANCE OF PROPOSED GENERAL AND REGIONAL CONFERENCES.

In order to restrict such meetings to urgent matters as measured by war needs and objectives, Secretary Wickard, in Memorandum No. 997, has asked that "when any agency of the Department of Agriculture, after careful consideration, deems it necessary to call such a conference, it will send a request for that purpose to the Office of the Secretary, care of the Executive Secretary to the Administrative Council." The request should include the following information: (1.) Time, place, and duration. (2.) Date when call should go out. (3.) Purpose and agenda. (4.) Number of Department employees expected; their general administrative status. (5.) Approximate cost of travel and per diem (to be shown separately) and if not sufficiently covered under 3, justification of such expenditure. (6.) Last date this or similar group was brought together. (7.) Other agencies of Department invited to send representatives and number expected to attend. (8.) Other federal Departments, State, local, or private groups invited to send representatives, and number expected to attend. Such requests will be given prompt consideration and the agency will be advised at the earliest possible moment of the Secretary's decision.

When an agency wishes to call together small groups, such as its several regional directors, or, within a region, its regional specialists, or State conferences of its supervisory or technical staff within a given State, or local or district meetings of its local employees, or similar meetings, advance clearance will not be required. However, when an agency contemplates calling to Washington or to its center of operations or to some other central location representatives from all its regions or major field units (even though the number involved is relatively small), it will be expected to advise this office of such contemplated meetings as a matter of information.

All field meetings that draw Department people from long distances should be planned so as to hold travel costs to a minimum. The place of meeting should be carefully selected and only those persons who are essential to the purpose of the meeting should be invited to attend. The Passenger Traffic Unit of the Department can give valuable assistance in determining the cost of transportation to specific points.

Frequently, representatives of other Department agencies are invited to attend meetings called primarily for the purpose of furthering a single agency's program. This is a desirable practice, and should be encouraged, but it is thought best, for the time being, to limit the number of such persons to one from an agency if travel expense is involved, unless in an exceptional case the agency head is convinced that multi-functional aspects of a conference require the attendance of additional representatives.

BETTER NUTRITION AND THE FIF PROGRAM. An article under this title, by T. Swann Harding, Office of Information, Washington, was published in the April Journal of the American Dietetic Association. Reprints are available, while the supply lasts, from Mr. Harding.

MEDIUM TRUCK OUTPUT BANNED. Office for Emergency Management release (WPB 429): Division of Industry Operations says further construction of medium trucks, after completion of February quotas, has been prohibited in order to save large quantities of critical materials.

March 30, 1942

NEW APPLE, APRICOT, CONCORD GRAPE. American Fruit Grower, March: As a successor to the Hopa and Redflesh crabapples comes the Almata, a redfleshed apple, originated at the South Dakota Experiment Station by N.E. Hanses. The apple is brilliantly red in color and its flesh also is bright red throughout. Its blossoms, likewise, are red, making the tree useful as an ornamental. The fruit is especially good for red sauce and red jellies. The Almata apple is a cross of the Arcade apple and the Fluke No. 38 crabapple and the Redflesh crabapple pollen.

Considering the Manchu apricot the most drought-resistant of orchard tree fruits, Mr. Hansen has been working to increase the size of the apricot he brought from North Manchuria. It is an annual bearing tree in spite of frosts and the hardy apricots equal standard varieties in quality, but are smaller in size. The Manchu apricot, ripening before the plums, finds a ready market.

An important new grape this season is the Seedless Concord. Slightly smaller than the ordinary Concord grape, it retains all the rich blue-black color and heavy fruiting qualities of the original Concord grape. Since it is absolutely seedless, it is a delicious and preferable grape for table use. The vines grow on a trellis and the fruits are luscious and abundant.

RAILROADS TO USE AUTO BOX CARS FOR GRAIN. Northwestern Miller, March 11: Large scale conversion of railroad cars used for transporting automobiles and automobile parts to box cars suitable for grain and other types of freight will begin shortly. Sufficient cars are expected to be released from automobile service to ease the "tight" situation in grain cars. As of Dec. 31, 1941, the Association of American Railroads reported there were 123,969 auto-box and auto-furniture cars owned by the railroads. This compares with 607,-100 general purpose box cars reported owned on the same date. Sharply increased volume of grain now being moved by the Commodity Credit Corp. is one reason prompting the quick conversion of automobile cars.

PAPER BAGS FOR FERTILIZER. American Fertilizer, February 28: Paper bags will be used by the fertilizer industry this year "because of the shortage of burlap" and use of higher analysis grades is being urged "in the interest of national defense and economy," D.S. Coltrane, assistant to the North Carolina Commissioner of Agriculture, said recently. North Carolina farmers use one-seventh of the Nation's output of fertilizer. "While the fertilizer situation is not critical at this time, farmers may well acquaint themselves with war conditions that will necessarily effect many changes in grades, manufacture and shipment of plant food," Coltrane said.

PLANNING A YEAR'S VITAMINS. Article under this title, in Farm Journal, April, gives the following table for a year's supply of vitamins for family of four or five: 2 good cows to freshen at different seasons.....30 layers and 40 pullet chicks to start the season; use and can the culls and cockerels... ..1 beef or veal, 1 or 2 hogs, 1 lamb for fresh meat and to freeze, can or cure. Use fish and game when available.....50 qts. canned green and yellow vegetables, 350 lbs. stored vegetables (important are carrots, squash), 125 qts. canned tomatoes or juice, 200 lbs. stored cabbage, green peppers, lettuce, 12 to 20 bu. stored potatoes, 50 lbs. dried beans or peas, 175 qts. canned fruit, 400 lbs. apples, citrus and dried fruit.....750 lbs. flour and cereal... 150 lbs. lard, bacon and salt pork, Sugar and syrup, plus home produced . . sorghum, honey or maple syrup.

March 30, 1942

NYLON SUBSTITUTES FOR OTHER FIBERS. Business Week, March 21: Without enough nylon fiber for spinning or enough yarn to supply wants of the weaving and knitting industry, rayon producers have orders from Washington to set aside a good part of their output for the hosiery industry and other erstwhile silk (and, now, nylon) users, for our neighbors in the other American republics, and for worsted manufacturers. With future nylon production, earmarked for the armed services, the War Production Board has issued the order diverting still more rayon yarn to hosiery manufacturers, former silk weavers, and "hardship" cases (regular rayon customers for whom the order results in undue suffering).

Beginning Apr. 1, rayon-yarn producers must turn 17% (instead of the present 12%) of total production, exclusive of war orders and export requirements, into silk-nylon replacement. Bulk of this 17% will go into hosiery. WPB has left the amount of acetate rayon, used mostly by weavers, going to fill the silk and nylon gap at 6% of total production. Washington also has made good its announcement of several weeks ago that 4% of total viscose and acetate yarn production (including war orders) would be set aside for export to "other American republics." Washington expects that, under the new allotment, at least 13,000,000 lb. of filament will go to other American republics this year.

WPB, ODT TO RATION NEW TRUCKS, TRAILERS. A rationing program for all types of new trucks, truck-tractors, and trailers, effective March 9, will be administered jointly by the War Production Board and the Office of Defense Transportation. It is set forth in General Conservation Order M-100. Rationing will permit gradual release of "frozen" stocks and make these vehicles available to Government and essential civilian users. Preliminary estimates indicate that approximately 196,000 trucks and truck trailers will be available for rationing during the next 22 months.

WAR INCREASES CANADIAN POULTRY DEMAND. Dominion Department of Agriculture, Ottawa: Never before have the people of Canada shown such a taste for poultry meat as they have recently. Reports to the Department from dealers in dressed poultry in all parts of Canada are to the effect that the war-time demand for poultry of all kinds, particularly chickens, has been notable heavy. Due to the substantial increase in the number of poultry on farms in the past year, as a result of the large orders for Canadian eggs placed by the British Ministry of Food, more birds have been marketed and now there are large stocks of high quality poultry on hand.

TO GET CHLORINE FOR WATER PURIFICATION. National Butter and Cheese Journal, March: Necessary amounts of chlorine for water purification will be provided throughout the nation despite the general chlorine shortage, the Chemicals and Allied Products Branch of the War Production Board announces. While chlorine is one of the most widely used chemicals in war manufacture, and many restrictions on civilian use have been necessary, water treatment will not be one of them. Chlorine in all forms for potable water and sewage treatment is given high preference over civilian and some war uses. This will permit water and sewage plants to obtain necessary supplies of chlorine and sodium hypochlorite.

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U.S. Department of Agriculture

Washington, D.C., March 31, 1942

1942 PACKAGING CONFERENCE. National Provisioner, March 12: A comprehensive analysis of measures being taken by various companies to adjust their operations to the most critical of problems in packaging, packing and shipping--namely, the shortage of basic materials--will be presented at the twelfth annual Packaging Conference of the American Management Association, to be held concurrently with the twelfth Packaging Exposition, New York, April 14 through 17. Departing radically from the traditional approach to packaging and shipping programs, the conference this year will center about measures successfully employed to align packaging practices with existing and impending material shortages.

RIPENING TEMPERATURE VITAL IN PEAR SHIPPING. Better Fruit, March: Shipping tests during the past season with California Bartlett pears have shown that ripening temperatures have a tremendous influence on the quality of the fruit after it arrives on the market. This was brought out in a report by the California College of Agriculture, United States Department of Agriculture, and the California Tree Fruit Agreement. Boxes of both late and early pears from every producing district in the state ripened best at 65-68 degrees Fahrenheit. Pears from the same shipments ripened in New York at 75-85 degrees turned dull green, lost flavor and texture, and often broke down completely.

FIELD EXPERIMENTS ON KERATITIS IN CATTLE. Under this title, article in Journal of American Veterinary Medical Association, March, says: Observations on 3,662 cattle treated with doses of keratitis bacterin showed that three injections (5, 10, and 15 cc.) early in the spring before any infection has occurred gave an immunity that prevented the trouble during the summer months. It is advisable to thoroughly study outbreaks of keratitis to determine the cause. The early use of keratitis bacterin appears to be a preventive rather than a curative agent. Further research on this disease seems essential. Although a disease costing cattle owners millions of dollars a year, it has received little attention in the field of research.

MORE LONG-STAPLE COTTON NECESSARY. The Office of Information has issued a mimeograph under this title, No. 6 of the Background Information Series, FfF Program. Copies are available from Information, Washington.

March 31, 1942

EMERGENCY MEASURES TO CONSERVE TIRES AND AUTOMOBILES. Secretary Wickard, in Memorandum No. 996, says: "I cannot overstate the serious necessity for conserving every automobile, truck, and rubber tire which the Department now possesses. The plain truth is that so far as can now be seen replacements of such automotive equipment and tires are not likely to be possible for a long time to come. The prohibitions as applied to civilian operations are likely to become even more stringent, as evidenced by the recent recommendations of the House sub-committee on War Department Appropriations which would bar the procurement of any passenger cars by any federal agency (except the White House) without the special approval of the Secretaries of War and Navy. Moreover it is exceedingly improbable that retreaded or recapped tires will be available to the Department.

"Emergency measures curtailing the use of passenger automobiles will have to be taken immediately upon a Department-wide basis. Wherever compatible with the performance of our duties we shall have to substitute for them the use of public carriers, despite the additional burden upon agency budget provision for travel by public carrier. Obviously local representatives must depend primarily upon automobiles to carry on direct work with farmers--in helping them to reach production goals, fight disease and insect epidemics, and to accomplish the many other purposes which are integral to our action programs. If other suitable transportation is available it should be used. But if alternative facilities are not available local automobile use must go on, but plans for the best use and care of equipment necessary for these indispensable activities should include every possibility for eliminating unnecessary automobile trips.

Effective immediately until further notice, the following restrictions on automobile travel shall be observed: "1.) Official cars may not be used for travel from Washington, regional, or State headquarters to field points, or from field points to State, regional, or Washington headquarters, except in cases of emergency, such as a forest fire, or when no other means of transportation is available, and then only with the permission of the appropriate officer--the Secretary, or the regional or State director, or similar officer. "2.) The use of private cars on a reimbursement basis should not be authorized for travel from Washington, regional, or State headquarters to field points, or from field points to State, regional, or Washington headquarters, except in cases of emergency, or when no other means of transportation is available, and then only by the appropriate officer empowered to issue such authorizations. "3.) Except when especially authorized by a responsible administrative officer, to meet an emergency, an official car may not be driven, except for repairs and servicing, beyond the boundaries of the area of duty ordinarily assigned, whether this area be a county, district, forest, or other working unit. "4.) Except when especially authorized by a responsible administrative officer, to meet an emergency, private cars will not be used on a reimbursement basis for travel beyond the boundaries of the area of duty ordinarily assigned.

"Each of the bureaus no doubt will be able to devise ways of curtailing automobile use that will be more effective for its operating conditions than those listed above. Accordingly, when the head of an agency has prepared an alternative set of instructions on automobile travel which will provide for maximum conservation of transportation facilities and at the same time meet the most urgent and essential needs of that agency, he may submit his

March 31, 1942

instructions to this office and, if approved, they will supersede the instructions given above.

"In addition to preparing automobile travel instructions every agency shall develop a plan for tire care and the allocation of all automobile equipment to maximize the life and administrative effectiveness of such equipment. These plans must particularly include arrangements for equipment needed for local field work. Wherever it is possible, agreements concerning the conservative use of employee owned cars regularly used for official business should be developed and incorporated in the agency plan. As rapidly as such conservation plans are perfected they should be reported to my office for informational purposes".

WHEAT SITUATION IN FOUR CHIEF EXPORTING COUNTRIES. Dominion Department of Agriculture, Ottawa: Despite signs of improvement in Canada's wheat statistical position, the outlook for the four major exporting countries, Canada, Argentina, the United States and Australia, points strongly in the direction of a record carryover of wheat at the close of the current crop year for this group as a whole, states the Monthly Review of the Wheat Situation for February. The United States is likely to witness the largest year-end accumulation of old wheat in its history. Argentina and Australia will have their less extensive storage facilities taxed to the limit. Canada alone has the prospect of a smaller year-end surplus on July 31, 1942, than existed twelve months earlier. By what amount it will be smaller than the 480 million bushels held on July 31, 1941, it is risky to predict but, at least part of the present improvement of more than 100 million bushels in the Canadian statistical position will still be held.

FFR TO BE THEME OF WISCONSIN STATE FAIR. National Butter and Cheese Journal, March: Food for Freedom will be the theme of this year's Wisconsin State Fair, as Wisconsin is a key state in the program to supply milk, cheese, eggs, and pork for the allies. Ralph E. Ammon, director, of State Department of Agriculture, has announced the following plan: Reduce the fair from nine to seven days to release men and equipment for production. The revised dates will be August 22 to 28 inclusive. Eliminate automobile and other motor races to conserve rubber and gasoline. Abandon all plans for new buildings and capital expansion during the war.

TESTING TEXTILE WAR MATERIALS. Canadian Textile Journal, March 13: A report on the work of the Laundry and Dry Cleaning Research Laboratory of the National Research Council, Ottawa, Ont. for the year 1941 states that textile work ranged from analysis of cotton fabrics and yarns for munitions to the testing of oil-dressed cotton cloth used for "anti-gas" clothing and to the preparation of specifications covering the various types of cotton fabrics required by the armed forces. Investigation of such properties as water-resistance, flame-proofness and mildew resistance of textile materials is being undertaken. The Council has announced the publication of a new monthly bulletin during 1942 which will describe results of work being carried out at the laboratory and will include from time to time information on new fabrics and processes.

March 31, 1942

FREEZING AND STORING FOOD ON FARM. Under this title, article in Agricultural Engineering, March, says: The Texas State Nutrition Committee, a subcommittee of a national organization, recently adopted a standard which sets up the amounts of the various kinds of food needed to supply the necessary proteins, minerals, and vitamins in the proper proportion for good health and vitality. This standard indicates an average annual food supply of approximately 2,000 lbs. per person. Eight hundred pounds of this amount consists of meats, fruits, and vegetables which could be frozen satisfactorily. A considerable amount of these products will be consumed fresh or processed by some other method than freezing. This is desirable because it will lend variety and interest to the diet. At the present time the average amount of food frozen and stored in locker plants in the United States is approximately 700 lbs. per family. than

There is need for further investigation along lines other/design and construction of mechanical equipment. More information is needed in regard to suitable varieties of vegetables and fruits adapted to various localities, and to the most satisfactory containers and methods of preparation. Recommendations for carefully planned schedules of food production based upon local climatic and soil conditions and farm practices are needed to enable the farmer to use frozen storage facilities to the best advantage.

BRITISH COMMUNITY FEEDING CENTERS. Survey Graphic, March: No other single measure in Britain is making a greater contribution to the health and welfare of the nation than the community feeding centers established by the Ministry of Food in the blitzed cities for workers and bombed-out families, in industrial plants wherever men and women are engaged in war industries, and in the reception areas for evacuated mothers and children. In February 1941, 70 percent of all factories employing more than 250 men or women were provided with a canteen at which good meals could be obtained at cost and the number has been increased since then. Extension of the plan for school meals is being pressed by the Board of Education to make it universal.

WAX THREAD SUBSTITUTES FOR COPPER WIRE. Florists Exchange, March 14: Since use of copper wire was discontinued under a priority ruling, we have searched ^{for} material that might serve a similar purpose, particularly for the nursery industry. The best thing discovered so far is a wax thread, costing around \$2 a pound; comes in 1/4 lb. tubes. Four tubes contain 2,000 ft., approximately 10 ft. for one cent. This wax thread, we are informed, will stand heat, cold and two years' exposure. We will be glad to send a small sample of this wax thread to anyone interested. If there is likely to be a demand for it, we will turn its advertising and handling over to the wholesale trade.

TEST TEASEL BURRS FOR COMBING WOOL. Business Week, March 21: Lack of steel for combing up the nap on woollens has started textile manufacturers experimenting with substitutes, among them the prickly burrs from teasel, a plant which grows wild in the copses and hedges of England and which English textile men used for centuries. Roy Heiple, of Mollala, Oregon, has been growing cultivated teasel for several years (he thinks he is the only teasel grower in the U.S.). Now Heiple's teasel has become a war crop.